

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: P249213

Luminaire Tested: **LSR8B120D010 EC8B120835 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249213
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 EC8B120835 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3500 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12439.0 lumens
Efficiency: N/A
Efficacy: 105.1 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

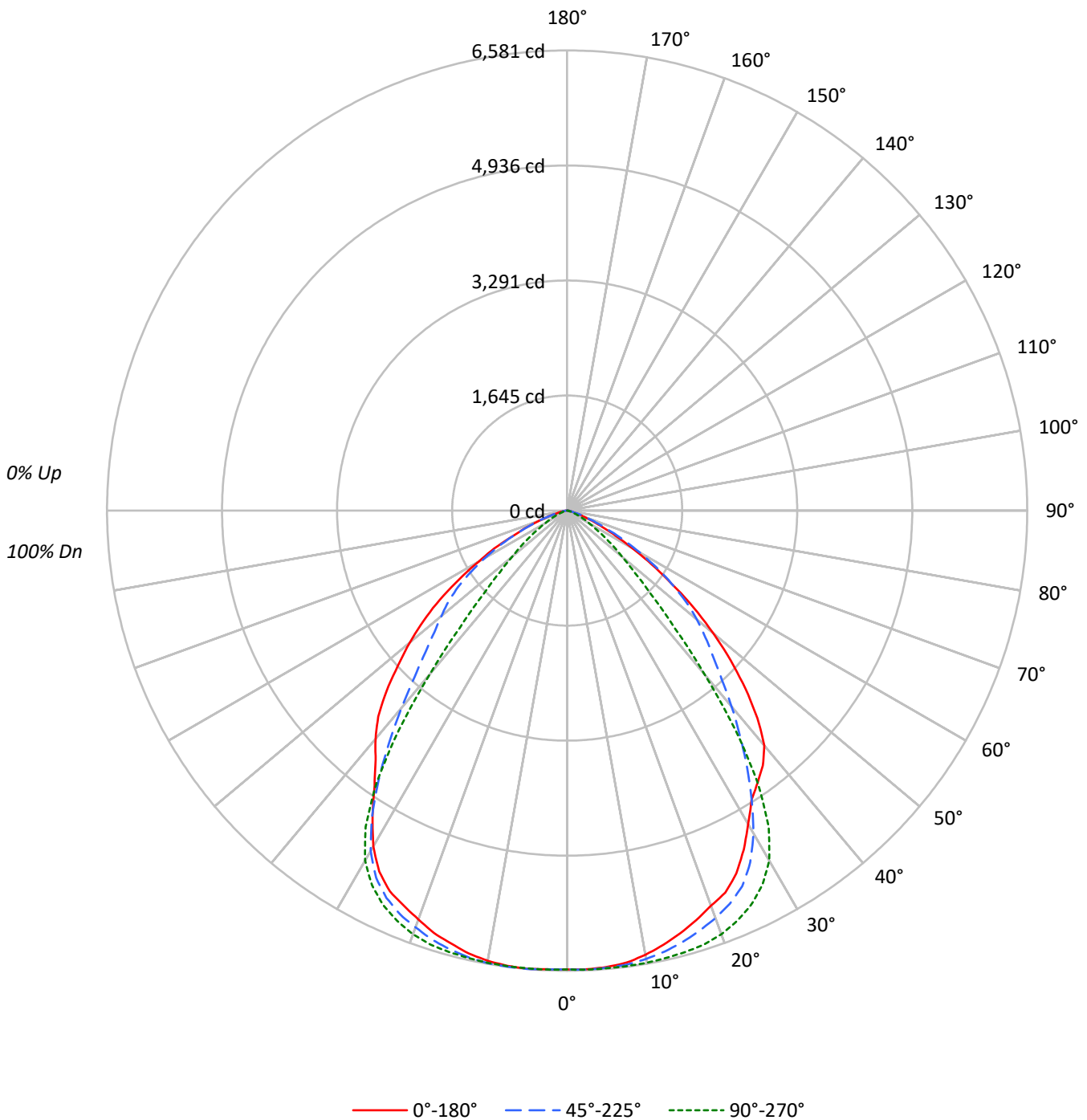
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	202382	202382	202382
5°	202827	203372	203591
10°	201972	205613	204730
15°	199733	208621	204685
20°	197335	211554	204157
25°	194774	211797	204366
30°	184268	205842	197439
35°	178765	178896	180756
40°	176550	123089	171591
45°	157316	73896	159466
50°	130807	49182	140949
55°	98104	33902	119506
60°	66483	22591	90165
65°	40102	14651	61947
70°	22233	7943	38110
75°	10079	3360	19730
80°	8755	3747	13762
85°	9977	4989	13728



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	626.4	5.0
10°-20°	1819.0	14.6
20°-30°	2760.9	22.2
30°-40°	2899.8	23.3
40°-50°	2174.1	17.5
50°-60°	1394.9	11.2
60°-70°	596.7	4.8
70°-80°	141.0	1.1
80°-90°	26.2	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°	5206.3	41.9
0°-40°	8106.1	65.2
0°-60°	11675.1	93.9
0°-90°	12439.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12439.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6563	6563	6563	6563	6563	
5°	6552	6563	6570	6581	6577	622
15°	6256	6387	6535	6493	6412	1765
25°	5725	5926	6225	6112	6006	2615
35°	4749	4485	4752	4696	4802	2980
45°	3607	2949	1694	2864	3657	2763
55°	1825	1825	631	1902	2223	1655
65°	550	648	201	835	849	587
75°	85	99	28	169	166	123
85°	28	18	14	28	39	30
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°	6563.1	6563.1	6563.1	6563.1	6563.1	6563.1	6563.1	6563.1	6563.1	6563.1	6563.1
2.5°	6566.6	6573.7	6570.1	6570.1	6566.6	6570.1	6570.1	6577.2	6577.2	6570.1	6566.6
5°	6552.5	6559.5	6559.5	6552.5	6552.5	6570.1	6559.5	6566.6	6566.6	6563.1	6563.1
7.5°	6520.8	6520.8	6534.9	6524.4	6524.4	6534.9	6531.3	6538.4	6545.5	6549.0	6549.0
10°	6450.3	6457.4	6460.9	6460.9	6464.4	6475.0	6482.0	6496.2	6503.2	6510.2	6513.8
12.5°	6362.3	6372.8	6376.4	6372.8	6383.4	6397.5	6415.1	6432.7	6443.3	6457.4	6468.0
15°	6256.5	6256.5	6263.6	6274.2	6281.3	6302.4	6320.0	6341.1	6369.3	6387.0	6404.5
17.5°	6140.3	6147.4	6157.9	6157.9	6172.1	6207.2	6217.8	6249.6	6281.3	6298.9	6334.1
20°	6013.5	6020.5	6031.1	6038.2	6055.8	6084.0	6105.1	6133.3	6168.5	6200.3	6235.4
22.5°	5914.8	5900.8	5907.8	5914.8	5932.5	5957.2	5981.8	6017.0	6052.2	6084.0	6119.2
25°	5724.6	5728.1	5738.7	5745.7	5766.9	5788.1	5816.2	5858.5	5890.2	5925.5	5964.2
27.5°	5467.5	5471.0	5488.6	5488.6	5506.2	5541.4	5559.0	5594.3	5636.6	5671.8	5717.6
30°	5175.1	5182.1	5182.1	5196.2	5206.7	5224.4	5242.0	5277.2	5298.4	5330.1	5393.5
32.5°	4907.4	4914.3	4910.8	4907.4	4896.8	4893.2	4889.7	4896.8	4903.8	4914.3	4939.0
35°	4748.8	4731.2	4717.1	4692.5	4664.3	4629.0	4597.3	4555.1	4516.3	4484.6	4449.4
37.5°	4597.3	4593.8	4572.7	4537.4	4481.0	4417.7	4343.7	4252.1	4160.5	4061.8	3966.8
40°	4385.9	4375.3	4357.8	4308.5	4245.0	4167.5	4068.9	3956.2	3808.2	3656.7	3501.7
42.5°	4026.6	4030.1	4009.0	3970.2	3910.4	3836.3	3734.2	3610.9	3452.4	3272.7	3071.9
45°	3607.4	3607.4	3600.3	3568.6	3526.4	3466.5	3389.0	3286.8	3131.8	2948.6	2733.7
47.5°	3170.6	3174.1	3163.5	3156.5	3138.8	3100.1	3043.8	2966.3	2857.0	2680.9	2466.0
50°	2726.7	2726.7	2744.3	2740.8	2740.8	2726.7	2702.1	2656.2	2561.1	2420.2	2219.4
52.5°	2282.8	2289.9	2300.5	2314.5	2332.1	2360.3	2332.1	2311.0	2251.1	2141.9	1969.3
55°	1824.8	1831.9	1849.5	1874.1	1895.3	1923.5	1930.5	1930.5	1898.8	1824.8	1694.5
57.5°	1433.8	1423.2	1437.4	1458.5	1486.7	1514.8	1536.0	1560.6	1557.1	1507.8	1402.1
60°	1078.0	1081.5	1092.0	1113.3	1134.4	1159.0	1187.2	1208.3	1218.9	1194.3	1127.3
62.5°	785.6	785.6	799.7	820.8	831.4	866.6	884.2	894.8	905.3	901.8	859.6
65°	549.6	556.6	563.7	574.3	584.8	605.9	616.5	637.6	644.7	648.2	616.5
67.5°	387.5	376.9	384.0	391.0	401.6	415.7	436.9	436.9	447.4	447.4	426.3
70°	246.6	246.6	250.1	260.7	267.7	271.3	278.3	285.3	295.9	292.4	292.4
72.5°	165.6	162.1	165.6	169.1	172.7	183.2	183.2	186.7	193.8	197.3	183.2
75°	84.6	88.1	95.1	91.6	102.1	95.1	98.6	109.2	105.7	98.6	98.6
77.5°	70.4	70.4	70.4	67.0	74.0	74.0	70.4	77.5	74.0	74.0	70.4
80°	49.3	52.8	49.3	45.8	49.3	45.8	45.8	45.8	45.8	45.8	42.2
82.5°	38.8	31.7	35.3	31.7	35.3	35.3	31.7	28.2	28.2	31.7	28.2
85°	28.2	21.1	24.7	24.7	21.1	21.1	21.1	21.1	21.1	17.6	17.6
87.5°	17.6	10.6	10.6	10.6	14.1	14.1	14.1	10.6	14.1	14.1	7.1
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°	6563.1	6563.1	6563.1	6563.1	6563.1	6563.1	6563.1	6563.1	6563.1	6563.1	6563.1
2.5°	6573.7	6570.1	6577.2	6573.7	6573.7	6570.1	6573.7	6570.1	6577.2	6563.1	6566.6
5°	6573.7	6566.6	6570.1	6573.7	6577.2	6570.1	6570.1	6570.1	6577.2	6570.1	6573.7
7.5°	6559.5	6556.0	6566.6	6573.7	6570.1	6566.6	6573.7	6570.1	6577.2	6573.7	6580.6
10°	6531.3	6534.9	6541.9	6552.5	6556.0	6559.5	6566.6	6566.6	6577.2	6563.1	6570.1
12.5°	6489.1	6503.2	6520.8	6527.8	6541.9	6541.9	6549.0	6552.5	6559.5	6556.0	6566.6
15°	6436.3	6453.8	6475.0	6492.6	6510.2	6520.8	6531.3	6534.9	6545.5	6534.9	6538.4
17.5°	6372.8	6393.9	6425.7	6446.8	6475.0	6485.6	6499.6	6506.7	6517.3	6510.2	6513.8
20°	6284.7	6309.5	6344.6	6376.4	6393.9	6418.6	6436.3	6446.8	6453.8	6446.8	6450.3
22.5°	6161.5	6196.7	6242.5	6267.1	6302.4	6323.5	6327.0	6351.7	6369.3	6351.7	6358.8
25°	6017.0	6052.2	6087.5	6140.3	6172.1	6196.7	6221.4	6224.9	6242.5	6239.0	6235.4
27.5°	5777.4	5823.3	5883.1	5925.5	5967.7	6006.5	6034.7	6041.6	6059.3	6052.2	6055.8
30°	5449.8	5499.2	5555.6	5622.5	5682.4	5721.1	5756.3	5781.0	5798.6	5788.1	5784.5
32.5°	4984.9	5034.2	5094.1	5161.0	5231.5	5287.8	5330.1	5361.8	5382.9	5375.9	5358.3
35°	4452.9	4467.0	4505.8	4558.6	4618.4	4678.3	4717.1	4752.3	4776.9	4784.0	4784.0
37.5°	3906.9	3861.1	3832.9	3832.9	3868.1	3892.7	3928.0	3949.1	3987.9	4001.9	4012.5
40°	3378.4	3272.7	3174.1	3100.1	3050.8	3047.3	3047.3	3057.8	3093.1	3138.8	3181.2
42.5°	2906.4	2737.2	2585.8	2448.4	2349.8	2293.4	2268.7	2272.3	2300.5	2342.7	2413.1
45°	2529.4	2318.0	2127.8	1962.2	1828.4	1740.3	1698.0	1694.5	1715.6	1764.9	1842.5
47.5°	2237.0	2011.5	1796.6	1606.4	1462.0	1366.8	1317.5	1303.5	1317.5	1363.3	1454.9
50°	1993.9	1761.5	1539.5	1342.2	1187.2	1088.6	1042.7	1025.2	1042.7	1081.5	1173.1
52.5°	1768.4	1528.9	1321.1	1130.8	965.3	880.7	831.4	820.8	831.4	877.2	951.2
55°	1507.8	1303.5	1099.1	908.9	764.5	679.9	641.1	630.6	641.1	683.5	761.0
57.5°	1250.7	1074.5	894.8	722.2	598.9	524.9	489.7	475.6	500.2	528.4	620.0
60°	1011.0	870.2	718.6	567.2	465.0	398.1	369.9	366.3	373.4	408.7	472.0
62.5°	792.7	676.4	556.6	433.3	348.8	320.6	285.3	281.9	288.9	310.0	359.4
65°	570.7	496.8	405.1	317.0	250.1	211.4	197.3	200.8	207.8	222.0	267.7
67.5°	398.1	345.2	281.9	222.0	172.7	155.0	140.9	137.4	140.9	165.6	190.2
70°	267.7	236.0	190.2	169.1	119.8	95.1	98.6	88.1	102.1	102.1	123.3
72.5°	176.1	155.0	126.8	98.6	84.6	67.0	67.0	63.4	70.4	74.0	91.6
75°	91.6	70.4	70.4	49.3	35.3	17.6	31.7	28.2	24.7	28.2	35.3
77.5°	63.4	52.8	49.3	38.8	35.3	28.2	28.2	28.2	28.2	31.7	35.3
80°	38.8	38.8	28.2	24.7	21.1	17.6	21.1	21.1	21.1	21.1	24.7
82.5°	24.7	21.1	21.1	17.6	17.6	14.1	14.1	14.1	14.1	14.1	21.1
85°	21.1	14.1	14.1	10.6	14.1	24.7	10.6	14.1	14.1	14.1	10.6
87.5°	7.1	10.6	10.6	10.6	7.1	3.5	7.1	10.6	10.6	17.6	14.1
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°	6563.1	6563.1	6563.1	6563.1	6563.1	6563.1	6563.1	6563.1	6563.1	6563.1	6563.1
2.5°	6573.7	6577.2	6577.2	6573.7	6573.7	6566.6	6580.6	6570.1	6573.7	6587.7	6577.2
5°	6580.6	6584.2	6584.2	6580.6	6580.6	6580.6	6584.2	6584.2	6580.6	6577.2	6584.2
7.5°	6594.8	6591.2	6591.2	6584.2	6584.2	6577.2	6584.2	6573.7	6580.6	6573.7	6584.2
10°	6577.2	6580.6	6577.2	6573.7	6573.7	6570.1	6570.1	6559.5	6563.1	6552.5	6559.5
12.5°	6566.6	6563.1	6563.1	6556.0	6549.0	6541.9	6538.4	6527.8	6527.8	6503.2	6513.8
15°	6538.4	6541.9	6531.3	6517.3	6510.2	6492.6	6485.6	6471.4	6457.4	6439.8	6443.3
17.5°	6513.8	6503.2	6489.1	6475.0	6446.8	6432.7	6418.6	6397.5	6390.4	6369.3	6362.3
20°	6439.8	6432.7	6415.1	6390.4	6372.8	6341.1	6327.0	6305.9	6288.3	6267.1	6256.5
22.5°	6344.6	6337.6	6316.4	6291.8	6263.6	6249.6	6235.4	6196.7	6179.0	6157.9	6154.4
25°	6224.9	6214.3	6193.2	6165.0	6150.9	6112.2	6098.0	6069.8	6062.9	6041.6	6038.2
27.5°	6041.6	6027.6	6002.9	5967.7	5943.0	5918.4	5904.3	5883.1	5876.1	5854.9	5851.5
30°	5766.9	5749.3	5700.0	5685.9	5643.6	5618.9	5618.9	5590.7	5594.3	5580.2	5580.2
32.5°	5333.6	5305.4	5266.6	5238.5	5210.3	5196.2	5196.2	5185.6	5192.7	5192.7	5199.7
35°	4759.4	4720.7	4699.5	4681.9	4681.9	4695.9	4738.2	4748.8	4770.0	4787.5	4801.7
37.5°	4023.1	4019.6	4044.3	4065.4	4118.2	4178.1	4252.1	4315.5	4375.3	4417.7	4459.9
40°	3226.9	3315.0	3385.4	3484.1	3565.1	3681.4	3815.2	3924.4	4026.6	4100.6	4178.1
42.5°	2518.8	2631.6	2779.6	2923.9	3068.4	3226.9	3403.1	3554.6	3688.4	3790.6	3871.6
45°	1962.2	2117.2	2296.9	2480.1	2666.8	2864.1	3047.3	3202.3	3343.2	3448.9	3529.9
47.5°	1581.7	1750.9	1955.2	2156.0	2367.4	2575.2	2779.6	2913.4	3029.6	3114.2	3188.2
50°	1306.9	1486.7	1701.6	1930.5	2141.9	2349.8	2525.9	2656.2	2751.4	2825.3	2871.1
52.5°	1092.0	1282.3	1511.3	1740.3	1951.6	2141.9	2300.5	2399.1	2476.6	2529.4	2571.6
55°	901.8	1085.1	1300.0	1514.8	1722.7	1902.3	2032.6	2106.7	2166.5	2198.2	2222.9
57.5°	736.3	905.3	1102.7	1300.0	1479.6	1627.6	1729.7	1803.7	1831.9	1856.5	1853.0
60°	577.8	736.3	915.9	1085.1	1240.1	1359.8	1433.8	1476.1	1497.2	1507.8	1500.7
62.5°	454.4	598.9	736.3	884.2	997.0	1099.1	1169.6	1169.6	1180.1	1183.7	1194.3
65°	338.2	447.4	567.2	676.4	767.9	834.9	873.7	884.2	898.4	894.8	887.8
67.5°	250.1	331.2	419.2	500.2	563.7	605.9	634.1	658.8	655.3	648.2	644.7
70°	172.7	225.5	303.0	352.3	398.1	440.4	447.4	450.9	454.4	458.0	450.9
72.5°	119.8	158.5	200.8	243.1	271.3	288.9	306.5	310.0	310.0	310.0	306.5
75°	59.9	81.0	119.8	137.4	162.1	169.1	183.2	183.2	193.8	179.6	176.1
77.5°	52.8	63.4	84.6	98.6	109.2	119.8	123.3	133.9	130.3	123.3	126.8
80°	31.7	38.8	52.8	59.9	74.0	77.5	81.0	84.6	81.0	84.6	84.6
82.5°	24.7	28.2	35.3	35.3	45.8	45.8	49.3	49.3	52.8	52.8	52.8
85°	14.1	24.7	21.1	42.2	28.2	28.2	35.3	42.2	35.3	35.3	42.2
87.5°	14.1	14.1	10.6	14.1	14.1	14.1	17.6	21.1	21.1	24.7	21.1
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: P249213

CATALOG NUMBER: LSR8B120D010 EC8B120835 8LBDWOWMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	6563.1	6563.1	6563.1	6563.1
2.5°	6573.7	6580.6	6570.1	6566.6
5°	6584.2	6584.2	6577.2	6577.2
7.5°	6584.2	6584.2	6573.7	6566.6
10°	6556.0	6556.0	6545.5	6538.4
12.5°	6503.2	6503.2	6499.6	6489.1
15°	6436.3	6436.3	6422.1	6411.6
17.5°	6344.6	6351.7	6334.1	6334.1
20°	6246.0	6242.5	6228.4	6221.4
22.5°	6143.9	6136.8	6133.3	6112.2
25°	6034.7	6027.6	6017.0	6006.5
27.5°	5848.0	5844.4	5833.8	5819.8
30°	5562.6	5559.0	5545.0	5545.0
32.5°	5192.7	5189.1	5175.1	5178.6
35°	4808.7	4822.8	4815.7	4801.7
37.5°	4488.1	4498.7	4505.8	4498.7
40°	4220.4	4252.1	4255.6	4262.7
42.5°	3935.0	3977.3	3991.4	3998.4
45°	3593.3	3632.1	3663.8	3656.7
47.5°	3244.5	3272.7	3300.9	3279.8
50°	2909.9	2927.5	2938.1	2938.1
52.5°	2592.8	2592.8	2589.3	2592.8
55°	2230.0	2230.0	2215.9	2222.9
57.5°	1849.5	1856.5	1845.9	1828.4
60°	1497.2	1479.6	1472.5	1462.0
62.5°	1166.1	1166.1	1141.4	1173.1
65°	873.7	863.1	852.5	849.0
67.5°	634.1	630.6	620.0	616.5
70°	447.4	433.3	429.8	422.7
72.5°	299.5	299.5	292.4	292.4
75°	183.2	165.6	162.1	165.6
77.5°	126.8	123.3	123.3	119.8
80°	84.6	81.0	88.1	77.5
82.5°	52.8	56.4	52.8	56.4
85°	35.3	42.2	38.8	38.8
87.5°	21.1	21.1	21.1	21.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)