

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: P249756

Luminaire Tested: **LSR8B80D010 EC8B80940 8LBSWOLI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249756
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13955)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B80D010 EC8B80940 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7881.0 lumens
Efficiency: N/A
Efficacy: 105.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.15
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

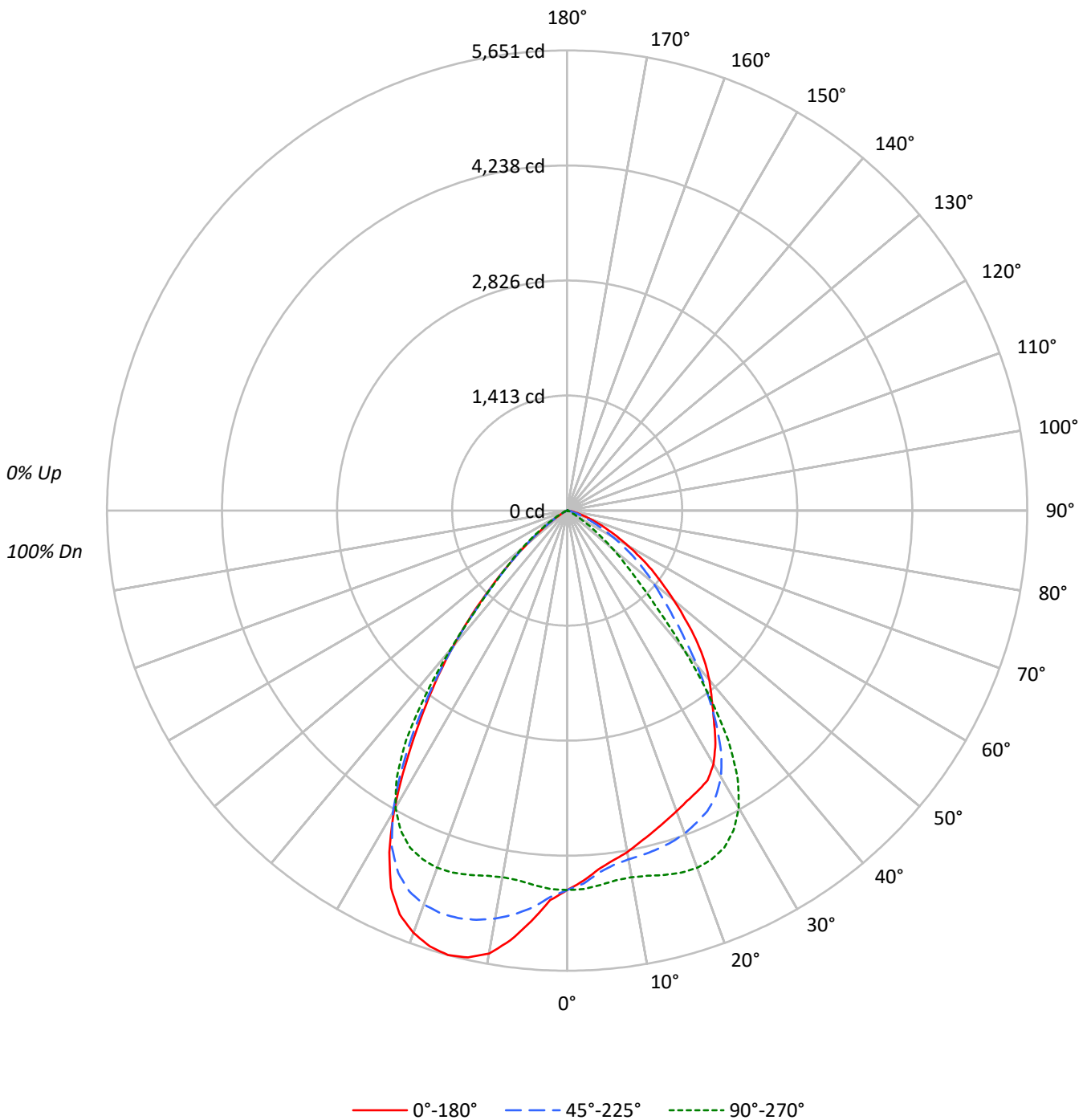
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	106	103	110	107	104	102	103	100	98	99	97	96	95	94	93	91					91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82					82			
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73					73			
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	69	65	61	60					60			
6	80	70	63	57	79	69	62	57	67	61	57	66	60	56	64	60	56	54					54			
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49					49			
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45					45			
9	67	55	48	44	66	55	48	44	54	48	43	53	47	43	52	47	43	42					42			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	43	40	38					38			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	143700	143700	143700
5°	136901	142900	156653
10°	133370	143121	172917
15°	130346	147863	180397
20°	128912	153205	181075
25°	129213	155371	174040
30°	128013	150036	151353
35°	118289	129846	118451
40°	109310	90024	87834
45°	97336	54320	56121
50°	81899	34996	31758
55°	68137	19198	14521
60°	53180	8326	4564
65°	39248	4130	2225
70°	27291	2552	974
75°	16608	524	0
80°	11987	781	0
85°	7713	778	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	448.0	5.7
10°-20°	1340.8	17.0
20°-30°	2053.3	26.1
30°-40°	2012.9	25.5
40°-50°	1212.2	15.4
50°-60°	557.9	7.1
60°-70°	196.0	2.5
70°-80°	51.3	0.7
80°-90°	8.7	0.1
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°	3842.0	48.8
0°-40°	5854.9	74.3
0°-60°	7625.0	96.8
0°-90°	7881.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7881.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4660	4660	4660	4660	4660	
5°	4423	4464	4616	4893	5061	418
15°	4083	4303	4632	5180	5651	1154
25°	3798	4072	4566	4910	5115	1749
35°	3142	3186	3449	3251	3147	1968
45°	2232	1838	1246	1254	1287	1712
55°	1267	1004	357	281	270	1131
65°	538	372	57	28	30	548
75°	139	81	4	0	0	169
85°	22	11	2	0	0	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°	4660.1	4660.1	4660.1	4660.1	4660.1	4660.1	4660.1	4660.1	4660.1	4660.1	4660.1
2.5°	4551.1	4555.5	4555.5	4555.5	4564.2	4566.5	4564.2	4566.5	4570.8	4586.0	4592.6
5°	4422.7	4416.2	4420.6	4418.3	4429.2	4435.8	4431.4	4437.9	4453.2	4464.1	4475.0
7.5°	4331.3	4331.3	4331.3	4335.6	4342.1	4355.2	4353.1	4357.4	4372.6	4387.8	4403.1
10°	4259.4	4257.2	4257.2	4268.1	4276.8	4292.0	4296.4	4309.5	4329.0	4348.7	4366.1
12.5°	4165.7	4168.0	4178.8	4189.8	4209.3	4233.2	4246.3	4263.8	4294.3	4326.9	4346.5
15°	4083.0	4085.2	4093.9	4115.6	4139.6	4168.0	4196.2	4224.5	4261.5	4303.0	4337.8
17.5°	4002.4	4004.6	4011.1	4035.1	4065.6	4102.6	4135.3	4172.3	4220.2	4268.1	4311.7
20°	3928.4	3926.2	3937.1	3958.9	3998.1	4032.9	4065.6	4109.2	4161.4	4220.2	4270.2
22.5°	3856.5	3856.5	3867.4	3889.2	3924.1	3958.9	3993.7	4039.4	4091.7	4148.3	4207.1
25°	3797.7	3795.6	3810.8	3821.7	3847.8	3882.7	3919.7	3956.7	4009.0	4072.2	4128.7
27.5°	3734.6	3732.5	3734.6	3747.7	3771.6	3797.7	3826.0	3858.7	3902.3	3954.6	4009.0
30°	3595.2	3597.4	3597.4	3608.3	3621.4	3649.6	3664.9	3697.6	3736.8	3780.3	3828.3
32.5°	3388.4	3390.5	3390.5	3394.9	3405.7	3418.8	3431.9	3455.8	3486.3	3523.3	3566.9
35°	3142.3	3142.3	3140.1	3142.3	3148.9	3148.9	3159.7	3148.9	3164.1	3185.9	3218.5
37.5°	2915.8	2911.4	2907.1	2902.7	2896.2	2885.3	2870.1	2843.9	2837.4	2828.7	2830.8
40°	2715.5	2713.3	2700.3	2689.3	2667.5	2641.5	2604.4	2558.7	2521.7	2478.1	2441.1
42.5°	2493.4	2491.1	2480.3	2460.7	2436.7	2397.6	2338.8	2277.8	2203.8	2138.4	2070.9
45°	2232.0	2238.6	2223.3	2201.5	2173.2	2136.2	2070.9	1996.8	1922.8	1837.9	1752.9
47.5°	1959.8	1957.7	1946.8	1933.7	1909.8	1872.8	1829.2	1748.6	1670.2	1591.9	1504.7
50°	1707.2	1698.5	1694.1	1681.1	1665.9	1635.4	1589.6	1524.3	1454.6	1380.6	1300.0
52.5°	1467.7	1467.7	1456.8	1448.1	1435.0	1411.1	1371.9	1319.7	1260.9	1191.1	1106.2
55°	1267.4	1263.0	1252.2	1241.2	1228.1	1212.9	1178.1	1134.6	1071.4	1003.9	929.8
57.5°	1054.0	1051.7	1047.4	1034.4	1027.8	1012.6	973.4	929.8	875.4	816.6	755.6
60°	862.3	853.7	844.9	836.2	825.3	810.1	783.9	746.9	701.2	648.9	588.0
62.5°	690.3	703.3	677.3	677.3	655.5	642.4	618.5	596.7	548.7	500.9	448.6
65°	537.9	537.9	526.9	518.3	505.2	489.9	466.0	444.2	409.3	372.3	335.3
67.5°	411.6	409.3	398.5	389.8	378.9	370.2	352.8	326.6	300.5	270.1	239.5
70°	302.7	300.5	298.3	283.1	274.4	263.5	250.4	233.0	213.4	191.6	163.3
72.5°	217.7	217.7	211.3	204.7	196.0	187.2	174.2	163.3	145.9	130.7	111.1
75°	139.4	137.2	137.2	126.3	126.3	113.2	104.5	98.0	89.3	80.6	63.2
77.5°	100.2	98.0	95.8	91.4	87.1	82.7	76.2	67.5	60.9	52.3	45.7
80°	67.5	63.2	60.9	60.9	54.4	52.3	54.4	41.4	39.2	32.6	28.3
82.5°	41.4	41.4	39.2	39.2	37.0	34.9	28.3	28.3	26.2	23.9	19.6
85°	21.8	28.3	19.6	21.8	19.6	21.8	19.6	15.2	13.1	10.8	10.8
87.5°	13.1	8.7	8.7	13.1	10.8	8.7	8.7	8.7	6.5	4.4	4.4
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4660.1	4660.1	4660.1	4660.1	4660.1	4660.1	4660.1	4660.1	4660.1	4660.1	4660.1
2.5°	4588.3	4603.5	4601.3	4620.9	4627.4	4642.7	4642.7	4653.5	4660.1	4675.3	4688.4
5°	4479.4	4503.3	4509.8	4533.8	4553.4	4577.3	4592.6	4616.5	4638.3	4671.0	4701.5
7.5°	4411.9	4431.4	4444.5	4472.8	4494.6	4520.7	4546.8	4579.5	4609.9	4649.2	4692.8
10°	4379.1	4405.3	4424.9	4453.2	4479.4	4507.7	4533.8	4570.8	4605.6	4655.7	4703.6
12.5°	4370.5	4400.9	4424.9	4464.1	4490.2	4520.7	4551.1	4592.6	4629.6	4681.8	4736.3
15°	4370.5	4411.9	4444.5	4488.0	4518.5	4557.7	4590.4	4631.7	4673.1	4727.5	4779.8
17.5°	4361.8	4411.9	4453.2	4503.3	4542.5	4581.7	4623.0	4662.3	4705.8	4758.1	4816.8
20°	4326.9	4390.1	4440.1	4498.9	4540.3	4583.9	4625.3	4668.7	4714.5	4769.0	4819.1
22.5°	4265.9	4340.0	4396.6	4459.7	4507.7	4551.1	4592.6	4636.1	4686.2	4738.5	4790.7
25°	4185.4	4255.0	4316.0	4381.3	4429.2	4477.1	4516.4	4566.5	4612.2	4662.3	4703.6
27.5°	4063.4	4137.4	4196.2	4263.8	4307.3	4353.1	4385.7	4427.1	4470.7	4512.0	4544.7
30°	3880.5	3948.0	4009.0	4069.9	4113.5	4146.2	4181.0	4213.7	4242.0	4270.2	4298.6
32.5°	3612.6	3673.7	3732.5	3789.0	3823.9	3852.2	3878.3	3897.9	3913.1	3928.4	3930.5
35°	3244.7	3294.7	3331.7	3381.8	3414.5	3440.6	3440.6	3449.3	3447.2	3440.6	3434.1
37.5°	2833.1	2852.6	2867.9	2887.5	2889.6	2889.6	2876.6	2865.7	2848.3	2843.9	2830.8
40°	2404.1	2377.9	2358.3	2332.2	2317.0	2284.3	2256.0	2236.4	2208.1	2203.8	2199.4
42.5°	1996.8	1935.9	1881.5	1835.8	1783.5	1737.7	1696.4	1665.9	1644.1	1641.9	1644.1
45°	1665.9	1596.2	1515.6	1452.5	1393.7	1337.0	1282.6	1245.6	1226.0	1221.6	1226.0
47.5°	1415.5	1334.9	1256.5	1184.6	1121.5	1058.3	1003.9	953.8	929.8	923.3	921.1
50°	1217.3	1134.6	1051.7	977.7	908.1	844.9	777.4	729.5	699.0	688.1	679.4
52.5°	1023.5	949.5	864.5	788.3	718.6	644.5	574.9	520.4	489.9	476.9	468.1
55°	853.7	779.6	701.2	627.2	553.1	479.1	409.3	357.1	324.5	309.2	298.3
57.5°	681.6	611.9	544.4	470.4	409.3	337.6	267.8	222.1	193.8	176.4	167.7
60°	526.9	472.5	413.7	352.8	294.0	235.2	178.5	135.0	113.2	100.2	89.3
62.5°	398.5	352.8	313.5	261.3	215.6	165.5	122.0	87.1	67.5	56.6	52.3
65°	287.4	252.6	217.7	185.1	152.5	115.4	82.7	56.6	39.2	32.6	30.5
67.5°	204.7	176.4	150.2	128.4	104.5	82.7	58.8	39.2	30.5	26.2	23.9
70°	143.7	122.0	104.5	85.0	69.6	54.4	45.7	28.3	17.4	19.6	15.2
72.5°	95.8	80.6	71.9	58.8	47.9	39.2	28.3	19.6	19.6	15.2	13.1
75°	52.3	47.9	37.0	28.3	23.9	21.8	8.7	4.4	2.2	6.5	2.2
77.5°	37.0	32.6	28.3	23.9	19.6	15.2	8.7	8.7	6.5	8.7	4.4
80°	23.9	19.6	17.4	17.4	10.8	6.5	4.4	4.4	6.5	2.2	2.2
82.5°	15.2	13.1	10.8	10.8	10.8	6.5	6.5	6.5	6.5	4.4	4.4
85°	8.7	6.5	4.4	4.4	2.2	4.4	0.0	2.2	2.2	0.0	0.0
87.5°	4.4	2.2	2.2	2.2	2.2	0.0	0.0	2.2	0.0	2.2	0.0
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4660.1	4660.1	4660.1	4660.1	4660.1	4660.1	4660.1	4660.1	4660.1	4660.1	4660.1
2.5°	4697.1	4705.8	4716.7	4725.4	4745.0	4749.3	4758.1	4766.8	4773.3	4779.8	4782.0
5°	4727.5	4760.3	4790.7	4823.4	4864.8	4893.1	4925.7	4954.0	4982.4	5006.3	5023.7
7.5°	4736.3	4786.3	4832.1	4888.7	4949.7	5002.0	5056.4	5110.8	5167.5	5211.0	5248.0
10°	4753.7	4814.7	4873.5	4941.0	5019.4	5089.0	5156.5	5228.4	5300.3	5361.2	5415.7
12.5°	4784.2	4851.7	4914.9	4988.9	5069.5	5147.8	5221.9	5302.4	5378.7	5446.2	5507.2
15°	4834.3	4897.4	4958.4	5028.1	5108.7	5180.5	5254.6	5332.9	5409.2	5478.8	5535.5
17.5°	4866.9	4925.7	4986.7	5049.9	5117.4	5182.7	5252.3	5322.1	5391.7	5454.9	5507.2
20°	4866.9	4923.6	4969.3	5025.9	5089.0	5145.7	5202.3	5263.3	5324.2	5376.5	5426.6
22.5°	4827.8	4882.2	4917.0	4960.6	5015.0	5062.9	5093.4	5160.9	5206.6	5252.3	5289.4
25°	4736.3	4775.5	4803.8	4834.3	4877.9	4910.5	4936.7	4975.8	5021.5	5039.0	5065.1
27.5°	4570.8	4599.1	4614.3	4620.9	4642.7	4660.1	4664.4	4681.8	4701.5	4705.8	4716.7
30°	4309.5	4311.7	4305.1	4303.0	4292.0	4279.0	4276.8	4274.6	4265.9	4257.2	4259.4
32.5°	3915.3	3904.5	3878.3	3850.0	3821.7	3791.3	3773.8	3752.0	3738.9	3725.9	3710.7
35°	3405.7	3379.7	3342.6	3307.8	3275.1	3251.1	3212.0	3198.9	3185.9	3168.4	3164.1
37.5°	2806.9	2791.7	2756.8	2730.7	2713.3	2702.4	2682.8	2669.8	2669.8	2663.2	2658.8
40°	2188.5	2184.2	2171.1	2177.6	2168.9	2173.2	2171.1	2166.7	2177.6	2177.6	2182.0
42.5°	1641.9	1644.1	1650.7	1655.0	1668.0	1670.2	1681.1	1681.1	1687.7	1694.1	1698.5
45°	1221.6	1230.4	1230.4	1239.1	1252.2	1254.3	1258.6	1260.9	1265.2	1276.1	1280.4
47.5°	916.8	918.9	918.9	921.1	925.4	929.8	927.7	929.8	936.4	932.0	936.4
50°	677.3	679.4	672.9	666.3	672.9	672.9	670.7	664.2	670.7	662.0	666.3
52.5°	461.7	459.5	452.9	455.2	450.8	448.6	448.6	444.2	444.2	444.2	435.5
55°	291.8	291.8	287.4	287.4	285.3	280.9	278.8	276.5	274.4	272.2	272.2
57.5°	163.3	165.5	159.0	156.8	159.0	156.8	152.5	152.5	152.5	145.9	150.2
60°	89.3	87.1	85.0	82.7	80.6	82.7	82.7	78.4	78.4	78.4	80.6
62.5°	47.9	47.9	45.7	45.7	43.6	43.6	47.9	41.4	43.6	41.4	43.6
65°	26.2	32.6	23.9	23.9	30.5	28.3	26.2	26.2	28.3	23.9	26.2
67.5°	28.3	19.6	17.4	19.6	17.4	17.4	17.4	21.8	19.6	15.2	19.6
70°	13.1	15.2	15.2	10.8	17.4	8.7	15.2	8.7	13.1	10.8	13.1
72.5°	13.1	13.1	13.1	8.7	13.1	8.7	10.8	10.8	8.7	8.7	13.1
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	4.4	4.4	2.2	2.2	2.2	2.2	4.4	4.4	4.4	0.0	2.2
80°	4.4	4.4	0.0	2.2	0.0	0.0	2.2	0.0	2.2	0.0	4.4
82.5°	2.2	4.4	2.2	2.2	4.4	4.4	4.4	2.2	2.2	2.2	2.2
85°	0.0	2.2	0.0	0.0	0.0	0.0	4.4	0.0	0.0	0.0	2.2
87.5°	0.0	2.2	0.0	0.0	0.0	0.0	2.2	2.2	0.0	0.0	0.0
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: P249756

CATALOG NUMBER: LSR8B80D010 EC8B80940 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4660.1	4660.1	4660.1	4660.1
2.5°	4784.2	4786.3	4790.7	4788.6
5°	5036.8	5054.3	5062.9	5060.8
7.5°	5274.1	5304.7	5322.1	5322.1
10°	5457.1	5491.9	5518.0	5522.4
12.5°	5555.0	5594.3	5629.2	5620.4
15°	5583.4	5622.6	5657.4	5650.8
17.5°	5550.7	5589.9	5616.1	5611.7
20°	5461.5	5494.1	5520.2	5518.0
22.5°	5322.1	5350.4	5372.2	5369.9
25°	5086.9	5106.5	5123.9	5115.2
27.5°	4725.4	4731.9	4742.8	4729.8
30°	4244.2	4248.5	4252.9	4250.7
32.5°	3704.1	3701.9	3697.6	3693.2
35°	3157.6	3157.6	3159.7	3146.6
37.5°	2661.0	2658.8	2665.4	2658.8
40°	2186.3	2184.2	2192.8	2182.0
42.5°	1705.1	1711.6	1713.8	1713.8
45°	1282.6	1284.8	1286.9	1286.9
47.5°	936.4	938.5	949.5	936.4
50°	662.0	664.2	666.3	662.0
52.5°	437.7	439.9	437.7	431.1
55°	267.8	270.1	270.1	270.1
57.5°	143.7	145.9	145.9	143.7
60°	78.4	76.2	78.4	74.0
62.5°	41.4	45.7	43.6	39.2
65°	26.2	26.2	26.2	30.5
67.5°	21.8	17.4	19.6	15.2
70°	13.1	15.2	15.2	10.8
72.5°	10.8	10.8	10.8	13.1
75°	0.0	0.0	0.0	0.0
77.5°	4.4	4.4	4.4	2.2
80°	2.2	0.0	2.2	0.0
82.5°	2.2	2.2	4.4	2.2
85°	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)