

Scaled data based on original data using  
LM-46-04 Photometric Testing of Indoor Luminaires Using High Intensity Discharge or  
Incandescent Filament Lamps (Reaffirmed 2012)

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: LUMIERE

Report Number: 246p109

Luminaire Tested: **1510-35T4-12-CS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-46-04  
Report Number: 246p109  
Test Lab: METALUX RESEARCH LABS  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMIERE  
Catalog Number: 1510-35T4-12-CS  
Description: MAUI 1510 SERIES PATHWAY LUMINAIRE  
Light Source: ONE - 35T4-GY6.35  
Ballast/Driver: -

**Summary**

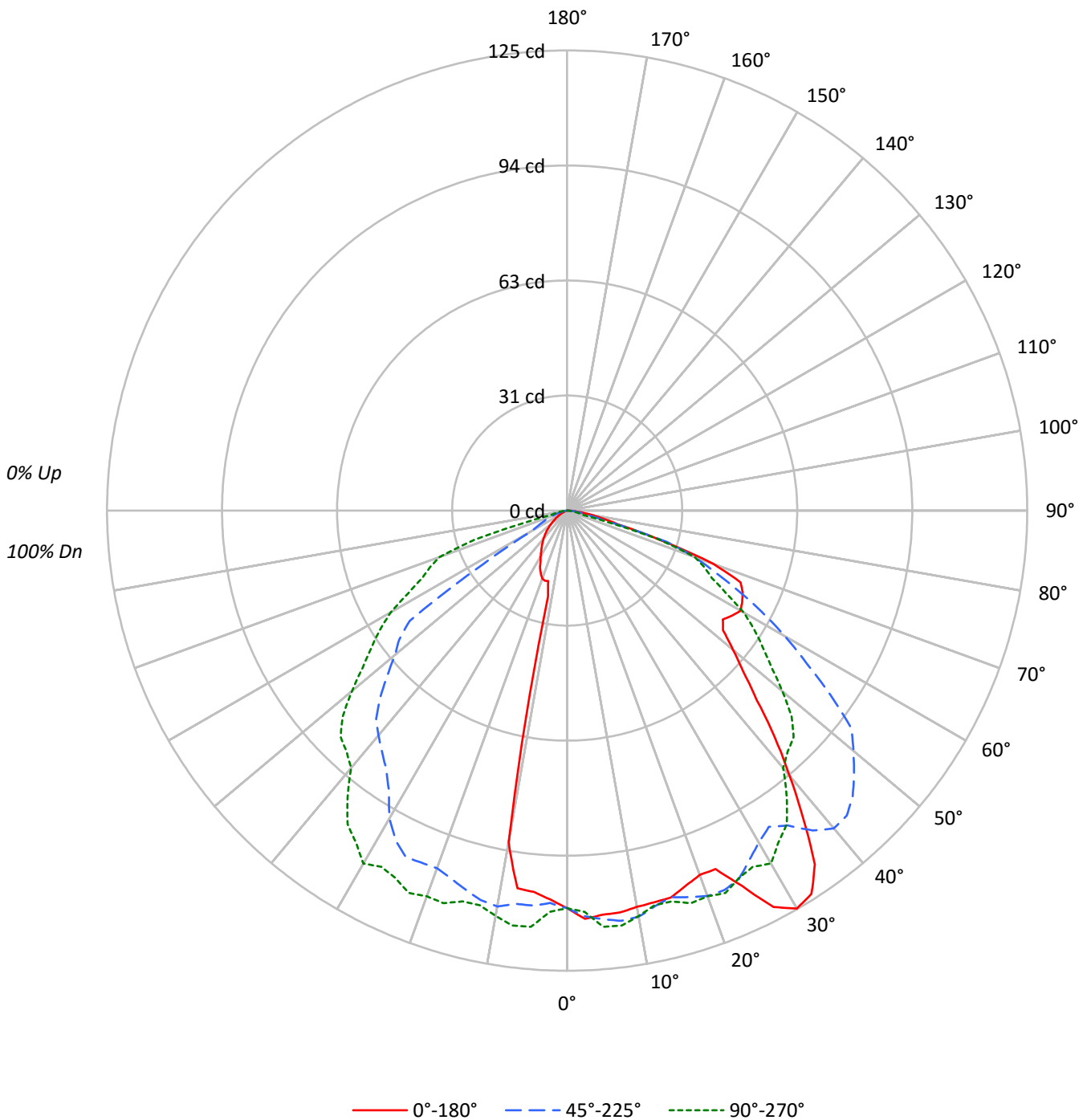
Lumens per Lamp: 600 (1 lamp)  
Luminaire Lumens: 304.4 lumens  
Efficiency: 50.7%  
Efficacy: 9.5 lumens/watt  
Spacing Criteria (0/90/45): 0.66 / 1.45 / 1.54  
Luminous Opening: Rectangular (W 0.38' x L: 0.26' x H: 0')  
CIE Type: Direct

Input Watts (W): 32  
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	60	60	60	60	59	59	59	59	56	56	56	54	54	54	52	52	52	51					51			
1	56	54	52	50	54	52	51	49	50	49	47	48	47	46	47	46	45					44				
2	51	47	44	41	50	46	43	41	44	42	40	43	41	39	41	39	38					37				
3	47	41	38	34	45	41	37	34	39	36	34	38	35	33	37	34	32					31				
4	43	37	33	29	42	36	32	29	35	31	29	34	31	28	33	30	28					27				
5	39	33	29	25	38	32	28	25	31	28	25	30	27	25	29	27	24					23				
6	36	30	25	22	35	29	25	22	28	25	22	27	24	22	27	24	21					20				
7	34	27	22	19	33	26	22	19	26	22	19	25	22	19	24	21	19					18				
8	31	24	20	17	30	24	20	17	23	20	17	23	19	17	22	19	17					16				
9	29	22	18	16	28	22	18	16	22	18	15	21	18	15	21	17	15					14				
10	27	21	17	14	27	20	17	14	20	16	14	19	16	14	19	16	14					13				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	11904	11904	11904
5°	12193	12558	11507
10°	12233	12513	10241
15°	12415	12541	2259
20°	12351	13079	2311
25°	13682	13402	2116
30°	15884	14089	1833
35°	15783	13994	1615
40°	13525	13137	1439
45°	11364	13561	1231
50°	10083	13084	977
55°	9916	12472	749
60°	11992	12191	529
65°	13719	11319	391
70°	13600	11859	290
75°	5962	1831	170
80°	4189	1523	0
85°	3035	759	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	10.5	3.4	1.7
10°-20°	29.3	9.6	4.9
20°-30°	46.7	15.3	7.8
30°-40°	59.8	19.7	10.0
40°-50°	60.7	19.9	10.1
50°-60°	49.1	16.1	8.2
60°-70°	35.0	11.5	5.8
70°-80°	12.2	4.0	2.0
80°-90°	1.2	0.4	0.2
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-30°	86.4	28.4	14.4
0°-40°	146.2	48.0	24.4
0°-60°	256.1	84.1	42.7
0°-90°	304.4	100.0	50.7
90°-120°	0.0	0.0	0.0
90°-150°	0.0	0.0	0.0
90°-180°	0.0	0.0	0.0
0°-180°	304.4	100.0	50.7

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	108	108	108	108	108	
5°	110	111	114	108	104	10
15°	109	109	110	107	20	31
25°	112	110	110	104	17	53
35°	117	104	104	86	12	71
45°	73	110	87	72	8	57
55°	52	87	65	52	4	48
65°	53	51	43	7	2	51
75°	14	10	4	2	0	20
85°	2	2	1	0	0	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	108.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0
2.5°	111.0	110.9	110.4	110.3	110.2	110.3	110.3	110.1	110.0	109.3	109.1
5°	110.2	110.2	110.3	110.8	111.3	111.4	112.0	111.6	112.5	113.3	113.5
7.5°	110.1	110.3	110.8	111.7	112.1	112.4	113.4	113.7	114.2	113.4	113.7
10°	109.3	109.4	110.7	111.9	112.2	112.0	111.7	111.7	111.2	111.4	111.8
12.5°	109.0	109.3	110.6	111.4	110.8	110.1	109.8	110.4	109.5	109.7	109.8
15°	108.8	109.2	111.6	112.0	110.1	108.7	108.7	109.5	109.7	109.9	109.9
17.5°	106.9	107.2	109.7	110.2	109.5	110.1	110.3	110.7	111.4	111.4	111.8
20°	105.3	105.7	107.5	106.7	108.0	111.4	112.4	113.0	113.0	112.0	111.5
22.5°	105.4	105.6	106.0	105.0	107.2	111.6	114.2	114.8	114.1	112.0	112.4
25°	112.5	112.5	107.8	105.1	107.4	110.4	114.1	116.3	112.2	109.6	110.2
27.5°	121.4	119.9	115.9	110.6	108.4	107.1	108.5	113.5	111.9	108.4	109.1
30°	124.8	123.4	119.9	118.9	110.7	104.1	104.5	110.0	114.2	110.3	110.7
32.5°	123.5	122.6	121.5	123.0	114.0	101.9	102.6	108.6	111.4	106.7	106.8
35°	117.3	115.9	120.9	123.5	118.6	104.4	101.8	106.5	108.1	103.5	104.0
37.5°	105.3	105.5	111.6	119.5	118.7	109.5	100.8	101.4	101.7	98.8	98.0
40°	94.0	94.4	99.6	108.3	117.3	112.7	98.1	95.5	95.5	92.5	91.3
42.5°	83.4	84.2	88.5	94.8	114.7	112.4	94.8	91.9	92.9	90.0	88.7
45°	72.9	74.5	79.0	85.8	106.4	109.7	93.2	90.4	91.7	88.4	87.0
47.5°	65.0	65.9	71.0	79.1	94.7	105.7	96.3	89.6	89.6	84.7	82.7
50°	58.8	59.5	63.6	73.0	83.9	101.5	100.6	87.1	84.9	78.6	76.3
52.5°	53.4	54.4	58.5	67.6	75.7	97.4	100.2	82.8	79.6	72.6	70.0
55°	51.6	52.0	54.3	61.8	67.9	87.3	93.9	77.3	74.7	68.1	64.9
57.5°	53.1	52.6	49.9	56.0	61.3	77.1	86.8	72.6	71.1	64.0	60.3
60°	54.4	53.8	46.9	51.0	56.2	68.3	80.6	68.8	66.0	58.5	55.3
62.5°	53.6	52.9	46.2	46.2	51.9	59.6	74.4	64.0	58.5	51.5	48.7
65°	52.6	50.1	46.1	42.0	46.2	51.0	68.0	57.4	51.3	45.5	43.4
67.5°	51.0	47.4	44.3	38.7	39.8	43.2	62.2	52.3	46.4	41.9	40.4
70°	42.2	40.8	42.4	36.0	34.6	36.7	55.6	48.7	42.2	37.9	36.8
72.5°	26.2	29.8	38.4	34.1	27.4	28.4	41.1	40.1	31.5	27.6	26.3
75°	14.0	15.8	22.8	18.8	13.1	10.3	8.0	6.7	5.4	4.4	4.3
77.5°	10.0	10.1	9.6	8.8	7.6	6.2	5.0	4.1	4.0	3.2	3.2
80°	6.6	6.7	6.5	5.9	5.0	4.1	3.4	2.8	2.9	2.5	2.4
82.5°	4.0	4.0	3.9	3.6	3.2	2.7	2.2	1.7	1.6	1.4	1.3
85°	2.4	2.4	2.4	2.2	1.9	1.6	1.3	0.9	0.8	0.7	0.6
87.5°	1.3	1.4	1.4	1.3	1.0	0.7	0.5	0.3	0.2	0.1	0.1
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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	108.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0
2.5°	109.0	108.4	107.7	107.4	106.7	106.4	105.9	105.8	105.7	105.7
5°	112.4	111.0	110.4	108.3	107.7	106.6	105.2	104.5	104.2	104.0
7.5°	113.5	113.2	111.4	109.8	107.7	106.6	105.5	104.1	103.3	103.5
10°	111.7	111.4	110.8	110.4	109.2	107.5	104.4	99.1	90.8	91.5
12.5°	110.0	109.8	109.6	109.3	108.4	106.9	102.1	90.3	42.9	23.9
15°	110.1	109.5	108.4	108.0	106.6	103.9	100.0	74.7	29.1	19.8
17.5°	111.5	111.0	109.7	107.1	104.8	101.8	97.3	86.5	22.3	20.0
20°	111.5	111.4	110.4	107.4	103.4	99.8	94.1	85.5	21.7	19.7
22.5°	111.1	110.2	108.9	107.5	103.5	98.7	91.0	83.8	20.5	18.6
25°	110.0	108.1	107.8	106.7	103.8	97.7	87.8	80.3	19.0	17.4
27.5°	108.9	107.8	105.2	104.3	100.9	96.3	86.5	75.9	17.3	15.7
30°	109.0	108.8	104.6	100.8	96.5	92.7	82.1	73.0	15.7	14.4
32.5°	106.5	105.3	102.7	95.8	90.1	87.9	80.5	70.5	14.3	13.1
35°	103.6	104.2	104.0	95.8	85.7	83.3	79.2	69.2	13.0	12.0
37.5°	98.0	97.3	97.9	94.4	82.6	78.2	77.1	69.5	11.9	11.0
40°	91.6	90.7	89.8	86.3	79.7	72.9	74.4	72.4	10.7	10.0
42.5°	88.3	86.5	83.5	79.6	76.8	69.2	71.6	75.7	9.5	8.9
45°	86.6	84.6	80.1	73.4	71.8	67.8	70.4	72.3	8.3	7.9
47.5°	82.7	82.5	77.4	69.3	66.2	67.0	59.8	41.7	7.3	6.8
50°	76.4	77.9	74.5	66.9	61.0	65.9	37.0	11.1	6.3	5.7
52.5°	69.9	71.7	69.7	64.7	57.5	40.1	12.8	9.3	5.3	4.7
55°	64.6	65.9	64.0	60.9	52.2	14.9	9.8	8.0	4.3	3.9
57.5°	60.4	62.5	58.7	55.4	27.1	10.2	8.4	6.9	3.5	3.2
60°	55.7	59.0	55.3	49.2	11.0	8.6	7.3	5.5	2.7	2.4
62.5°	49.0	52.9	51.8	27.0	8.8	7.2	6.1	4.1	2.1	1.9
65°	43.8	46.5	46.7	9.5	7.1	5.9	5.1	2.5	1.6	1.5
67.5°	41.2	42.6	38.3	7.3	5.8	4.8	3.8	1.4	1.2	1.2
70°	37.6	39.5	13.4	5.8	4.6	3.5	2.5	0.9	0.8	0.9
72.5°	26.6	27.2	5.2	4.5	3.4	2.4	1.6	0.5	0.5	0.6
75°	4.2	4.1	3.9	3.4	2.2	1.7	1.0	0.2	0.3	0.4
77.5°	3.1	3.1	3.4	2.6	1.5	1.1	0.5	0.0	0.0	0.1
80°	2.4	2.5	3.0	1.9	0.9	0.9	0.0	0.0	0.0	0.0
82.5°	1.3	1.3	1.3	0.8	0.3	0.1	0.0	0.0	0.0	0.0
85°	0.6	0.5	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	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

(END OF REPORT)