

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: H45029

Luminaire Tested: **1507-INC18**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-46-04  
Report Number: H45029  
Test Lab: ELK GROVE VILLAGE  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMIERE  
Catalog Number: 1507-INC18  
Description: LUMIERE 6" DIA DOME SHAPE POST MOUNT  
Light Source: 1142 CLEAR DC BAYONET BASE 12 VOLT  
S-8 ANSI 1142 18 WATTS 264 LUMENS  
Ballast/Driver: -

**Summary**

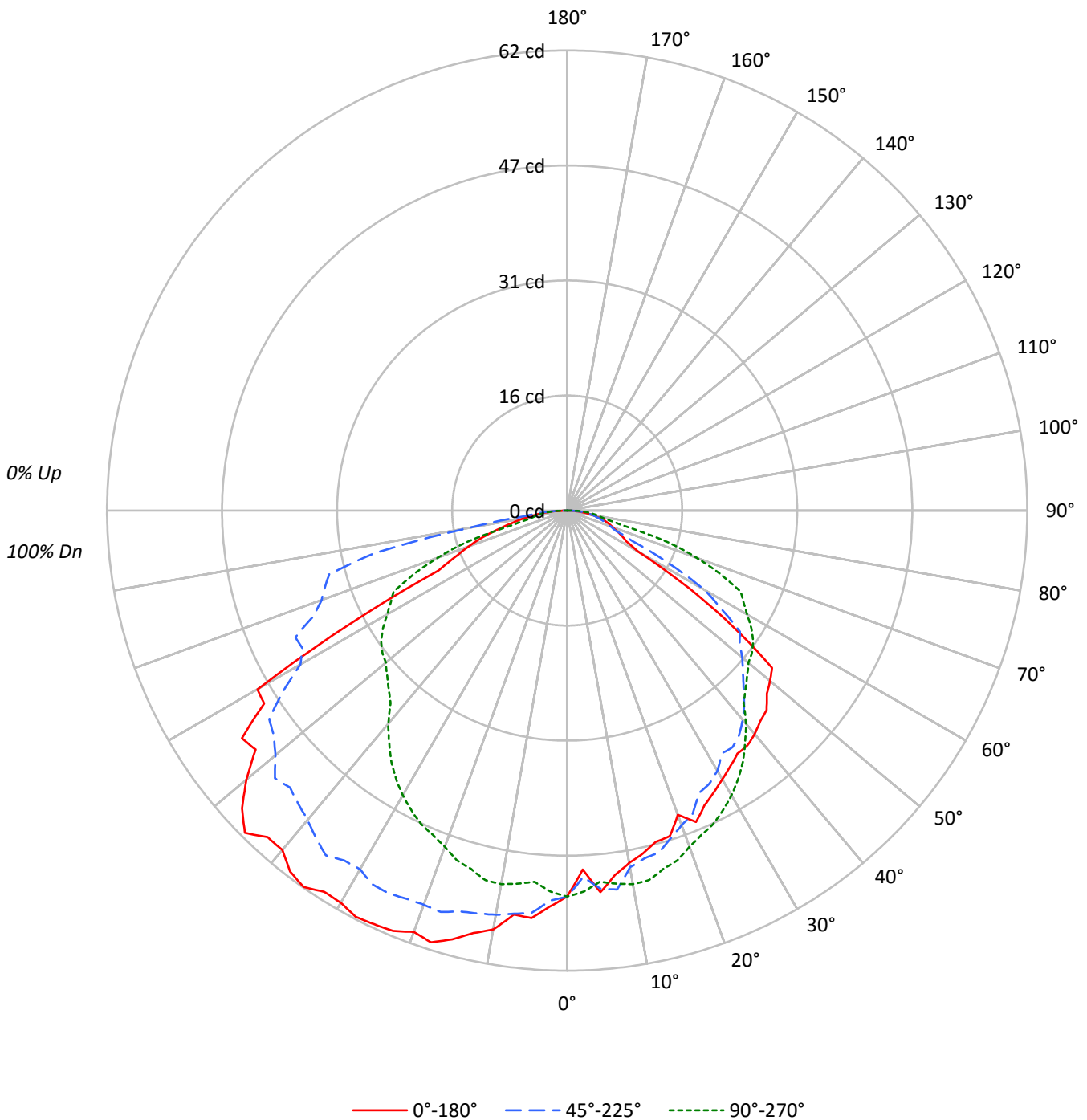
Lumens per Lamp: 264 (1 lamp)  
Luminaire Lumens: 177.9 lumens  
Efficiency: 67.4%  
Efficacy: 9.9 lumens/watt  
Spacing Criteria (0/90/45): 1.5 / 1.26 / 1.53  
Luminous Opening: (L: 0' x W: -0.41' x H: 0'  
CIE Type: Direct

Input Watts (W): 18  
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	0
RCR																		
0	80	80	80	80	78	78	78	78	75	75	75	72	72	72	69	69	69	67
1	73	70	67	64	71	68	65	63	65	63	61	63	61	59	60	59	57	56
2	66	60	55	51	64	59	54	51	56	53	50	54	51	48	52	50	47	46
3	60	52	47	42	58	51	46	42	49	45	41	47	44	40	46	42	40	38
4	55	46	40	35	53	45	39	35	44	39	35	42	38	34	40	37	34	32
5	50	41	35	30	49	40	34	30	39	34	30	37	33	29	36	32	29	27
6	46	37	30	26	45	36	30	26	35	30	26	34	29	25	33	28	25	24
7	43	33	27	23	41	33	27	23	32	26	22	31	26	22	30	25	22	21
8	40	30	24	20	38	30	24	20	29	24	20	28	23	20	27	23	20	18
9	37	28	22	18	36	27	22	18	26	21	18	26	21	18	25	21	18	16
10	35	25	20	16	34	25	20	16	24	19	16	24	19	16	23	19	16	15

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

	0°	90°	180°
0°	Luminous shape not found,		
5°	reference photometric report, or contact		
10°	the photometric lab for calculations.		
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	5.0	2.8	1.9
10°-20°	14.7	8.2	5.6
20°-30°	22.9	12.9	8.7
30°-40°	29.1	16.3	11.0
40°-50°	32.9	18.5	12.5
50°-60°	31.9	18.0	12.1
60°-70°	24.1	13.5	9.1
70°-80°	14.3	8.0	5.4
80°-90°	3.0	1.7	1.1
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°	42.6	23.9	16.1
0°-40°	71.6	40.3	27.1
0°-60°	136.5	76.7	51.7
0°-90°	177.9	100.0	67.4
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°	177.9	100.0	67.4

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	52	52	52	52	52	
5°	52	51	50	54	55	5
15°	46	48	50	56	60	13
25°	44	42	47	57	62	20
35°	40	39	41	57	62	25
45°	38	34	34	53	61	29
55°	27	28	31	49	54	23
65°	8	10	26	40	19	8
75°	5	5	8	33	9	5
85°	2	2	3	4	3	2
90°	0	0	0	0	0	0
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: H45029  
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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0
2.5°	48.4	48.7	49.4	50.2	51.4	52.7	52.6	53.1	53.4
5°	51.6	52.1	51.1	48.5	50.2	53.8	54.4	55.0	55.1
7.5°	49.5	50.9	51.5	50.1	50.7	54.4	54.8	55.1	54.9
10°	48.2	47.9	48.8	49.8	51.1	54.4	55.3	56.5	57.3
12.5°	47.3	48.2	48.0	49.7	51.0	54.1	55.6	58.4	58.3
15°	46.2	47.0	47.7	47.3	50.0	54.1	55.9	59.1	59.8
17.5°	46.0	46.0	46.3	46.9	49.4	53.1	56.7	60.8	61.0
20°	43.6	45.6	45.1	45.8	48.2	52.1	56.5	61.4	60.4
22.5°	45.4	44.4	44.2	45.3	47.3	51.7	56.6	61.1	61.3
25°	43.8	44.2	42.0	42.8	46.6	51.2	56.9	61.4	61.5
27.5°	42.8	43.4	41.5	41.2	45.5	50.5	56.8	60.2	61.7
30°	41.8	42.1	40.5	39.8	44.3	49.3	55.8	60.3	61.0
32.5°	40.9	41.0	38.8	38.6	42.9	47.8	55.9	59.9	60.9
35°	40.0	39.7	38.9	37.9	41.3	46.6	56.7	60.0	61.9
37.5°	39.9	38.9	38.1	36.0	39.4	45.8	55.6	60.7	61.3
40°	39.3	38.3	36.8	34.5	37.5	44.9	54.4	60.8	59.7
42.5°	38.5	37.6	35.3	32.7	35.2	44.7	53.6	61.5	59.7
45°	38.0	37.2	33.6	30.9	34.0	43.1	52.8	61.6	61.4
47.5°	36.5	36.7	32.1	29.1	32.9	40.8	53.4	58.8	59.4
50°	35.7	35.8	30.8	28.6	31.9	37.8	51.3	57.2	56.4
52.5°	34.8	34.8	29.3	28.2	31.4	35.8	49.8	56.3	52.9
55°	27.3	25.8	28.4	27.4	30.6	36.5	49.0	51.7	53.5
57.5°	19.6	15.4	24.6	26.3	29.4	36.6	45.4	50.9	48.4
60°	11.0	10.8	21.4	24.5	28.0	35.9	41.5	49.8	48.2
62.5°	9.0	9.0	15.6	20.0	26.8	34.8	40.2	47.6	32.5
65°	8.2	8.1	9.8	16.2	25.8	33.6	40.4	44.9	19.1
67.5°	7.3	7.3	7.0	12.7	22.3	32.6	36.9	42.8	16.3
70°	6.5	6.4	6.2	8.0	18.6	32.1	35.2	38.6	14.1
72.5°	5.9	5.7	5.4	6.0	14.4	28.4	34.2	31.8	11.9
75°	5.2	5.0	4.8	5.2	7.8	21.8	33.2	30.2	9.4
77.5°	4.3	4.2	4.1	4.4	5.2	12.4	26.6	18.6	7.4
80°	3.5	3.5	3.5	3.7	4.4	5.8	13.5	8.3	5.8
82.5°	2.5	2.6	2.8	3.1	3.6	4.5	5.6	5.5	4.1
85°	1.6	1.7	2.0	2.2	2.8	3.2	3.7	3.5	2.8
87.5°	0.8	0.9	1.1	1.3	1.7	1.9	2.1	1.9	1.3
90°	0.3	0.4	0.4	0.5	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	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):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)