

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: 112P107

Luminaire Tested: **DCI-248VHO**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 112P107
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: DCI-248VHO
Description: Heavy-duty Industrial with tombstone sockets.
Light Source: Two-F48T12/CW/1500, 6500 Lumens ea., 110 Watts ea.
Ballast/Driver: -

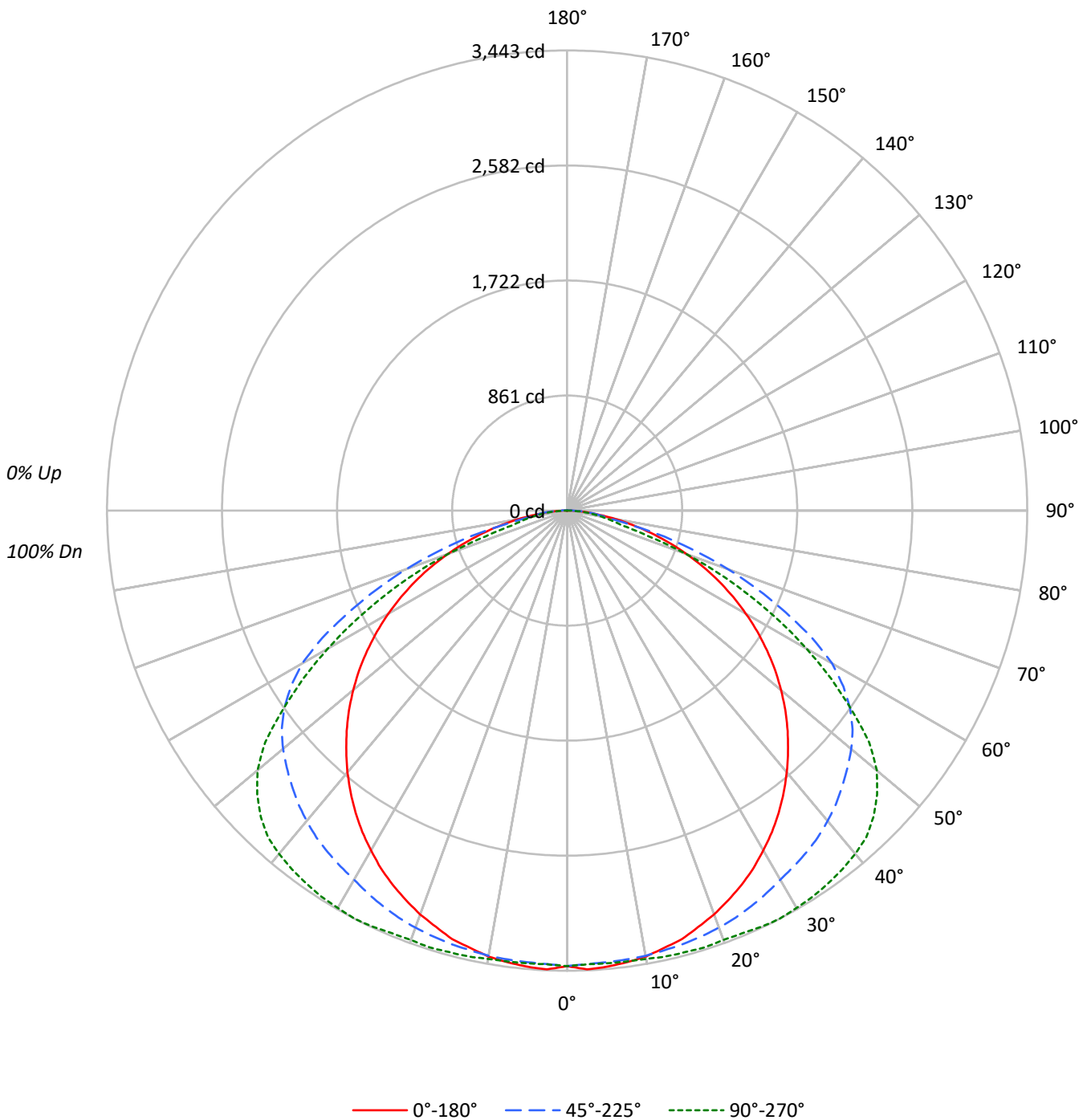
Summary

Lumens per Lamp: 6500 (2 lamps)
Luminaire Lumens: 11682.8 lumens
Efficiency: 89.9%
Efficacy: 52.0 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.52 / 1.57
Luminous Opening: Rectangular (W 1.09' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 224.6
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										
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	107	107	107	107	104	104	104	104	100	100	100	95	95	95	91	91	91	90																				
1	97	93	89	86	95	91	87	84	87	84	81	84	81	79	80	78	76	75																				
2	88	81	74	69	86	79	73	68	76	71	67	73	69	65	70	66	63	61																				
3	80	70	63	57	78	69	62	56	66	60	55	64	58	54	61	57	53	51																				
4	73	62	54	48	71	61	53	47	58	52	46	56	50	46	54	49	45	43																				
5	67	55	47	40	65	54	46	40	52	45	40	50	44	39	48	43	39	37																				
6	62	49	41	35	60	48	40	35	47	40	34	45	39	34	44	38	34	32																				
7	57	44	36	31	55	44	36	30	42	35	30	41	35	30	40	34	30	28																				
8	53	40	32	27	51	40	32	27	38	32	27	37	31	27	36	31	26	25																				
9	49	37	29	24	48	36	29	24	35	29	24	34	28	24	33	28	24	22																				
10	46	34	27	22	45	33	26	22	32	26	22	32	26	21	31	25	21	20																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8384	8384	8384
5°	8461	8377	8399
10°	8464	8449	8509
15°	8456	8550	8711
20°	8417	8695	8951
25°	8385	8863	9327
30°	8338	9059	9752
35°	8289	9376	10226
40°	8212	9738	10768
45°	8117	10135	11276
50°	7995	10621	11574
55°	7832	11083	11139
60°	7602	11263	10180
65°	7300	10496	8773
70°	6841	9186	6769
75°	6169	7158	3992
80°	5214	4279	3684
85°	4037	4601	3444



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	324.3	2.8	2.5	0°	3408	3408	3408	3408	3408	
10°-20°	951.1	8.1	7.3	5°	3426	3401	3392	3400	3401	326
20°-30°	1507.0	12.9	11.6	15°	3320	3315	3357	3407	3420	936
30°-40°	1944.2	16.6	15.0	25°	3089	3138	3265	3384	3436	1424
40°-50°	2199.0	18.8	16.9	35°	2760	2875	3122	3332	3405	1726
50°-60°	2137.5	18.3	16.4	45°	2333	2535	2913	3172	3241	1799
60°-70°	1608.5	13.8	12.4	55°	1826	2172	2584	2657	2597	1631
70°-80°	772.8	6.6	5.9	65°	1254	1737	1803	1595	1507	1239
80°-90°	201.3	1.7	1.5	75°	649	1053	753	470	420	689
90°-100°	26.3	0.2	0.2	85°	143	255	163	130	122	164
100°-110°	6.1	0.1	0.0	90°	20	114	40	8	0	15
110°-120°	2.4	0.0	0.0	95°	1	57	27	5	0	1
120°-130°	1.4	0.0	0.0	105°	0	13	6	2	0	0
130°-140°	0.9	0.0	0.0	115°	0	4	4	1	0	0
140°-150°	0.1	0.0	0.0	125°	0	2	3	2	0	0
150°-160°	0.0	0.0	0.0	135°	0	1	2	2	0	0
160°-170°	0.0	0.0	0.0	145°	0	0	0	0	0	0
170°-180°	0.0	0.0	0.0	155°	0	0	0	0	0	0
0°-30°	2782.3	23.8	21.4	165°	0	0	0	0	0	0
0°-40°	4726.5	40.5	36.4	175°	0	0	0	0	0	0
0°-60°	9063.0	77.6	69.7	180°	0	0	0	0	0	0
0°-90°	11645.6	99.7	89.6							
90°-120°	34.7	0.3	0.3							
90°-150°	37.2	0.3	0.3							
90°-180°	37.0	0.3	0.3							
0°-180°	11682.8	100.0	89.9							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3408	3408	3408	3408	3408
2.5°	3436	3408	3396	3399	3398
5°	3426	3401	3392	3400	3401
7.5°	3409	3387	3388	3403	3403
10°	3388	3369	3382	3404	3406
12.5°	3351	3344	3369	3406	3417
15°	3320	3315	3357	3407	3420
17.5°	3266	3279	3340	3407	3426
20°	3215	3237	3321	3401	3419
22.5°	3154	3191	3296	3389	3423
25°	3089	3138	3265	3384	3436
27.5°	3018	3078	3228	3382	3443
30°	2935	3016	3189	3372	3433
32.5°	2852	2947	3156	3354	3424
35°	2760	2875	3122	3332	3405
37.5°	2661	2800	3082	3302	3383
40°	2557	2718	3032	3268	3353
42.5°	2446	2628	2977	3228	3314
45°	2333	2535	2913	3172	3241
47.5°	2215	2444	2846	3090	3145
50°	2089	2357	2775	2983	3024
52.5°	1961	2267	2692	2848	2849
55°	1826	2172	2584	2657	2597
57.5°	1687	2070	2451	2405	2341
60°	1545	1963	2289	2146	2069
62.5°	1401	1848	2066	1874	1793
65°	1254	1737	1803	1595	1507
67.5°	1103	1620	1545	1311	1229
70°	951	1470	1277	1050	941
72.5°	800	1285	1008	742	638
75°	649	1053	753	470	420
77.5°	507	825	471	341	333
80°	368	604	302	268	260
82.5°	245	400	231	199	190
85°	143	255	163	130	122
87.5°	66	183	96	62	52
90°	20	114	40	8	0
92.5°	3	90	33	6	0
95°	1	57	27	5	0
97.5°	1	34	20	4	0
100°	0	23	13	4	0
102.5°	0	17	8	3	0
105°	0	13	6	2	0
107.5°	0	10	5	1	0
110°	0	8	4	1	0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0	5	4	2	0
115°	0	4	4	1	0
117.5°	0	3	3	2	0
120°	0	3	3	2	0
122.5°	0	2	3	1	0
125°	0	2	3	2	0
127.5°	0	1	3	2	0
130°	1	0	2	2	0
132.5°	0	1	2	2	0
135°	0	1	2	2	0
137.5°	0	1	2	2	0
140°	1	1	1	2	0
142.5°	0	0	0	0	0
145°	0	0	0	0	0
147.5°	0	0	0	0	0
150°	0	0	0	0	0
152.5°	0	0	0	0	0
155°	0	0	0	0	0
157.5°	0	0	0	0	0
160°	0	0	0	0	0
162.5°	0	0	0	0	0
165°	0	0	0	0	0
167.5°	0	0	0	0	0
170°	0	0	0	0	0
172.5°	0	0	0	0	0
175°	0	0	0	0	0
177.5°	0	0	0	0	0
180°	0	0	0	0	0

(END OF REPORT)