

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: P30533

Luminaire Tested: **2HP3-WO-332S36I-UNV-HB81**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P30533
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2HP3-WO-332S36I-UNV-HB81
Description: METALUX HP3 HIGH PERFORMANCE RECESSED 2x4 FLUORESCENT LUMINAIRE
WHITE OPTICS HOUSING, 18 CELL SEMI-SPECULAR LOUVER, PAF BALLAST COVER
Light Source: (3) THREE LINEAR FLUORESCENT LAMPS, F32T8 32W - 3100 LUMENS EA
Ballast/Driver: -
ULT B332IUNVHP-A

Summary

Lumens per Lamp: 3100 (3 lamps)
Luminaire Lumens: 7065.4 lumens
Efficiency: 76.0%
Efficacy: 83.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.5 / 1.49
Luminous Opening: Rectangular (W 1.75' x L: 3.75' x H: 0')
CIE Type: Direct

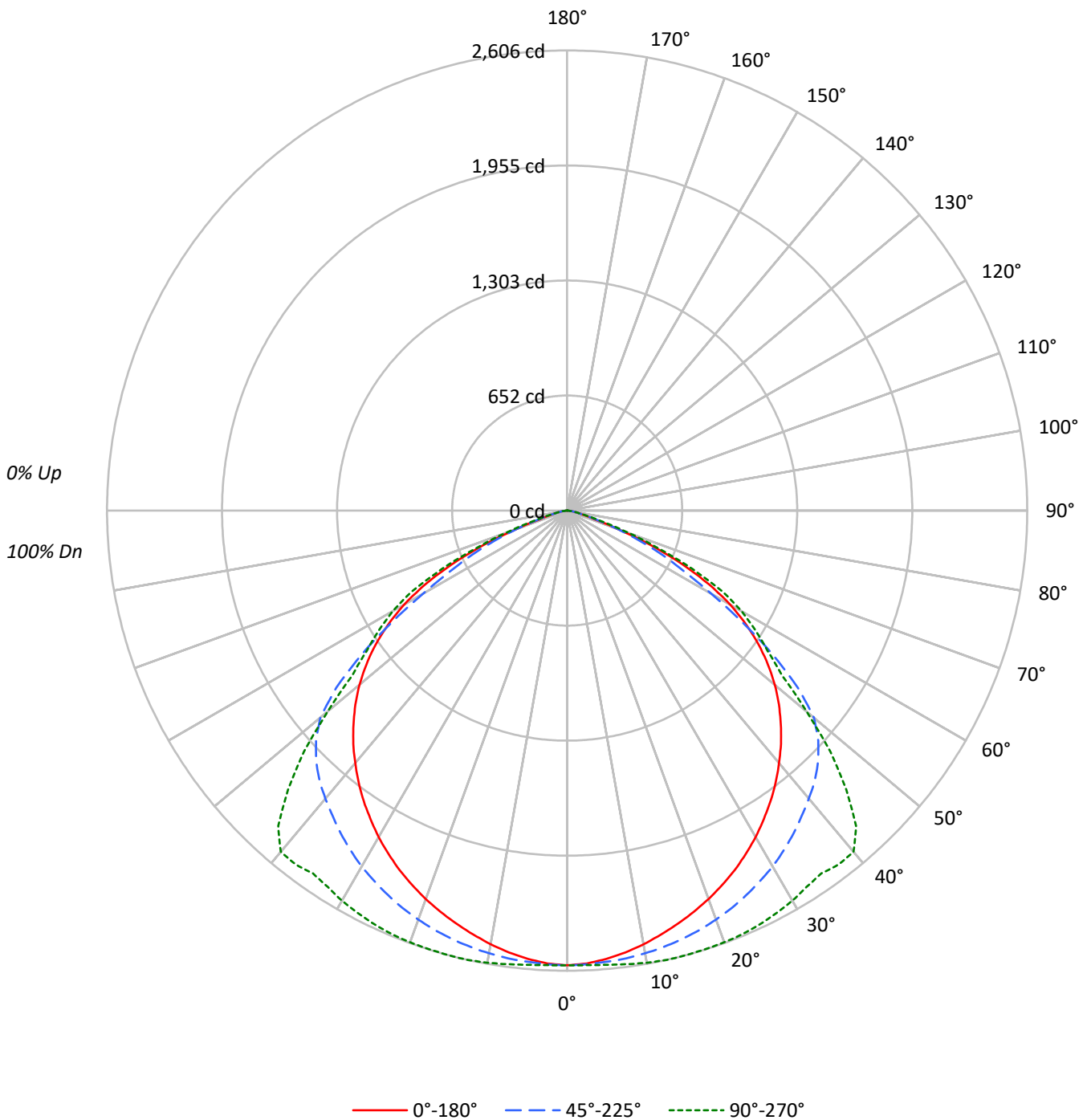
Input Watts (W): 84.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	90	90	90	90	88	88	88	88	84	84	84	81	81	81	78	78	78	76
1	84	81	78	76	82	79	77	74	76	74	72	73	71	70	70	69	68	66
2	77	71	67	63	75	70	66	62	67	64	61	65	62	59	63	60	58	57
3	71	63	58	53	69	62	57	53	60	55	52	58	54	51	56	53	50	48
4	65	56	50	45	63	55	49	45	53	48	44	52	47	44	50	46	43	42
5	60	50	44	39	58	49	43	39	48	43	38	46	42	38	45	41	38	36
6	55	45	39	34	54	45	38	34	43	38	34	42	37	33	41	36	33	32
7	51	41	35	30	50	40	34	30	39	34	30	38	33	30	37	33	29	28
8	47	37	31	27	46	37	31	27	36	30	27	35	30	26	34	30	26	25
9	44	34	28	24	43	34	28	24	33	28	24	32	27	24	31	27	24	22
10	41	32	26	22	40	31	25	22	30	25	22	30	25	21	29	25	21	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4224	4224	4224
5°	4197	4223	4251
10°	4154	4240	4330
15°	4113	4267	4425
20°	4086	4303	4542
25°	4065	4347	4678
30°	4044	4409	4831
35°	4023	4473	5024
40°	3998	4561	5402
45°	3969	4662	5184
50°	3919	4654	4514
55°	3789	4058	3966
60°	3500	3087	3743
65°	2794	2317	3035
70°	1439	1434	1794
75°	621	640	754
80°	378	378	397
85°	169	188	151



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	244.2	3.5	2.6	0°	2575	2575	2575	2575	2575	
10°-20°	710.2	10.1	7.6	5°	2549	2551	2565	2573	2582	242
20°-30°	1111.2	15.7	11.9	15°	2422	2447	2513	2572	2606	684
30°-40°	1408.9	19.9	15.1	25°	2246	2302	2402	2510	2585	1035
40°-50°	1528.1	21.6	16.4	35°	2009	2098	2234	2383	2509	1257
50°-60°	1232.1	17.4	13.2	45°	1711	1839	2010	2177	2235	1319
60°-70°	679.0	9.6	7.3	55°	1325	1445	1419	1276	1387	1177
70°-80°	138.1	2.0	1.5	65°	720	728	597	706	782	697
80°-90°	13.6	0.2	0.1	75°	98	95	101	108	119	129
90°-100°	0.0	0.0	0.0	85°	9	9	10	6	8	14
100°-110°	0.0	0.0	0.0	90°	1	0	0	0	1	1
110°-120°	0.0	0.0	0.0	95°	0	0	0	0	0	0
120°-130°	0.0	0.0	0.0	105°	0	0	0	0	0	0
130°-140°	0.0	0.0	0.0	115°	0	0	0	0	0	0
140°-150°	0.0	0.0	0.0	125°	0	0	0	0	0	0
150°-160°	0.0	0.0	0.0	135°	0	0	0	0	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°	2065.5	29.2	22.2	165°	0	0	0	0	0	0
0°-40°	3474.4	49.2	37.4	175°	0	0	0	0	0	0
0°-60°	6234.6	88.2	67.0	180°	0	0	0	0	0	0
0°-90°	7065.4	100.0	76.0							
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°	7065.4	100.0	76.0							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2575	2575	2575	2575	2575
2.5°	2567	2566	2572	2573	2577
5°	2549	2551	2565	2573	2582
7.5°	2524	2531	2558	2576	2591
10°	2494	2507	2546	2579	2600
12.5°	2459	2478	2531	2579	2606
15°	2422	2447	2513	2572	2606
17.5°	2383	2415	2491	2562	2604
20°	2341	2381	2465	2547	2602
22.5°	2295	2344	2437	2531	2596
25°	2246	2302	2402	2510	2585
27.5°	2192	2256	2366	2484	2569
30°	2135	2208	2328	2455	2551
32.5°	2072	2154	2282	2419	2526
35°	2009	2098	2234	2383	2509
37.5°	1940	2039	2181	2365	2526
40°	1867	1974	2130	2349	2523
42.5°	1793	1909	2076	2310	2422
45°	1711	1839	2010	2177	2235
47.5°	1627	1761	1929	1979	2021
50°	1536	1673	1824	1748	1769
52.5°	1434	1568	1647	1498	1534
55°	1325	1445	1419	1276	1387
57.5°	1204	1301	1176	1132	1266
60°	1067	1134	941	1005	1141
62.5°	908	941	748	871	990
65°	720	728	597	706	782
67.5°	515	499	441	519	565
70°	300	296	299	345	374
72.5°	158	158	176	196	217
75°	98	95	101	108	119
77.5°	64	61	63	65	73
80°	40	37	40	38	42
82.5°	22	20	22	19	21
85°	9	9	10	6	8
87.5°	2	1	3	0	2
90°	1	0	0	0	1
92.5°	0	0	0	0	0
95°	0	0	0	0	0
97.5°	0	0	0	0	0
100°	0	0	0	0	0
102.5°	0	0	0	0	0
105°	0	0	0	0	0
107.5°	0	0	0	0	0
110°	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0	0	0	0	0
115°	0	0	0	0	0
117.5°	0	0	0	0	0
120°	0	0	0	0	0
122.5°	0	0	0	0	0
125°	0	0	0	0	0
127.5°	0	0	0	0	0
130°	0	0	0	0	0
132.5°	0	0	0	0	0
135°	0	0	0	0	0
137.5°	0	0	0	0	0
140°	0	0	0	0	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)