

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: 220p221

Luminaire Tested: **2HP3GX-332S36I-HB82**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 220p221  
Test Lab: METALUX RESEARCH LABS  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2HP3GX-332S36I-HB82  
Description: FORMED WHITE HIGH-REFLECTANCE PRE-PAINT STEEL HOUSING &  
COMPONENTS, NO REFLECTOR, 18 CELL, 3" NOM., SILVER SEMI-SPECULAR  
LOUVER, TALL SKTS  
Light Source: THREE LINEAR FLUORESCENT LAMPS, F32T8 32W - 3100 LUMENS EA  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 3100 (3 lamps)  
Luminaire Lumens: 7114.9 lumens  
Efficiency: 76.5%  
Efficacy: 79.9 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.5 / 1.48  
Luminous Opening: Rectangular (W 1.73' x L: 3.75' x H: 0')  
CIE Type: Direct

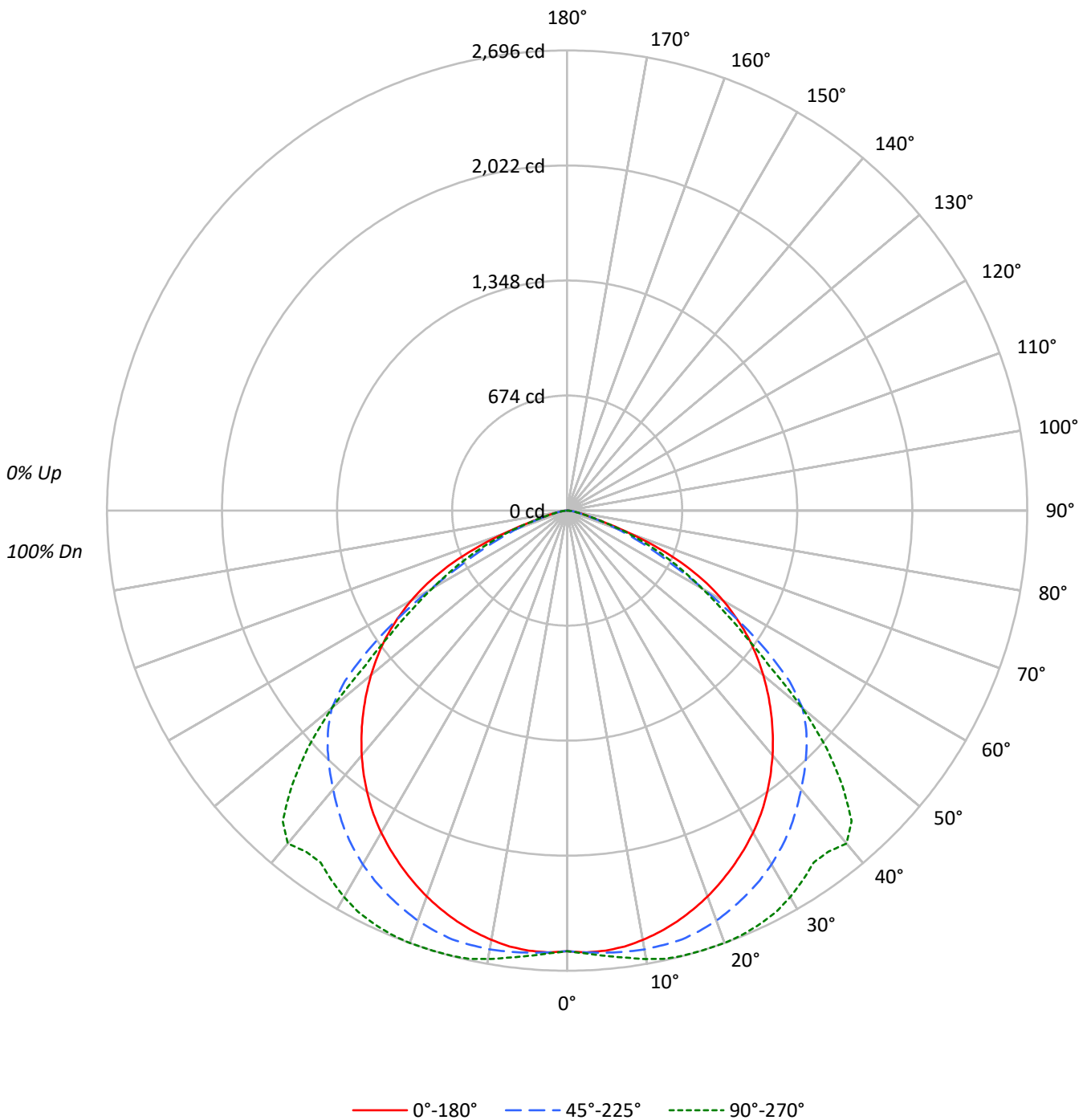
Input Watts (W): 89  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0	
RCR																						
0	91	91	91	91	89	89	89	89	85	85	85	81	81	81	78	78	78	77				
1	84	81	79	76	82	80	77	75	76	74	72	73	72	70	71	69	68	67				
2	78	72	67	63	76	71	66	63	68	64	61	65	62	60	63	61	59	57				
3	71	64	58	53	69	63	57	53	60	56	52	58	54	51	56	53	50	49				
4	65	57	50	46	64	56	50	45	54	49	45	52	48	44	51	47	44	42				
5	60	51	44	40	59	50	44	39	48	43	39	47	42	39	46	41	38	37				
6	56	46	39	35	54	45	39	34	44	38	34	42	38	34	41	37	34	32				
7	51	42	35	31	50	41	35	30	40	34	30	39	34	30	38	33	30	28				
8	48	38	32	27	47	37	31	27	36	31	27	35	30	27	35	30	27	25				
9	45	35	29	24	44	34	28	24	33	28	24	33	28	24	32	27	24	23				
10	42	32	26	22	41	32	26	22	31	26	22	30	25	22	29	25	22	21				

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

	0°	45°	90°
0°	4286	4286	4286
5°	4312	4332	4364
10°	4305	4399	4497
15°	4283	4470	4631
20°	4250	4517	4763
25°	4213	4551	4896
30°	4177	4589	5010
35°	4126	4614	5101
40°	4057	4622	5517
45°	3972	4658	5355
50°	3874	4651	4643
55°	3745	4104	3658
60°	3506	3081	3024
65°	3021	2200	2471
70°	1941	1500	1738
75°	847	815	859
80°	554	516	497
85°	381	362	286



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	248.6	3.5	2.7	0°	2582	2582	2582	2582	2582	
10°-20°	733.4	10.3	7.9	5°	2588	2591	2600	2611	2619	246
20°-30°	1147.1	16.1	12.3	15°	2492	2527	2601	2664	2695	703
30°-40°	1429.6	20.1	15.4	25°	2300	2377	2485	2600	2673	1060
40°-50°	1528.3	21.5	16.4	35°	2036	2142	2277	2415	2517	1273
50°-60°	1195.6	16.8	12.9	45°	1692	1822	1984	2214	2281	1305
60°-70°	644.2	9.1	6.9	55°	1294	1403	1418	1236	1264	1151
70°-80°	164.4	2.3	1.8	65°	769	758	560	588	629	742
80°-90°	23.7	0.3	0.3	75°	132	124	127	135	134	177
90°-100°	0.0	0.0	0.0	85°	20	20	19	17	15	26
100°-110°	0.0	0.0	0.0	90°	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°	2129.1	29.9	22.9							
0°-40°	3558.7	50.0	38.3							
0°-60°	6282.7	88.3	67.6							
0°-90°	7114.9	100.0	76.5							
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°	7114.9	100.0	76.5							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2582	2582	2582	2582	2582
2.5°	2591	2589	2591	2594	2597
5°	2588	2591	2600	2611	2619
7.5°	2576	2585	2607	2630	2642
10°	2554	2572	2610	2648	2668
12.5°	2526	2551	2607	2661	2689
15°	2492	2527	2601	2664	2695
17.5°	2451	2497	2582	2655	2696
20°	2406	2462	2557	2642	2696
22.5°	2355	2422	2523	2624	2689
25°	2300	2377	2485	2600	2673
27.5°	2241	2326	2443	2569	2651
30°	2179	2271	2394	2528	2614
32.5°	2111	2210	2338	2476	2569
35°	2036	2142	2277	2415	2517
37.5°	1956	2069	2206	2362	2517
40°	1872	1991	2133	2352	2546
42.5°	1784	1908	2060	2326	2467
45°	1692	1822	1984	2214	2281
47.5°	1597	1728	1900	2015	2064
50°	1500	1631	1801	1786	1798
52.5°	1400	1523	1642	1513	1489
55°	1294	1403	1418	1236	1264
57.5°	1178	1265	1173	1035	1075
60°	1056	1112	928	868	911
62.5°	922	943	717	720	764
65°	769	758	560	588	629
67.5°	589	555	427	462	488
70°	400	353	309	342	358
72.5°	227	201	205	221	223
75°	132	124	127	135	134
77.5°	87	81	82	84	83
80°	58	55	54	53	52
82.5°	37	36	34	32	31
85°	20	20	19	17	15
87.5°	8	8	8	7	6
90°	0	0	0	0	0

(END OF REPORT)