

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: NEO-RAY

Report Number: BAL 7901

Luminaire Tested: **202-BX40**

Issue Date: 3/3/2020

**Test Information**

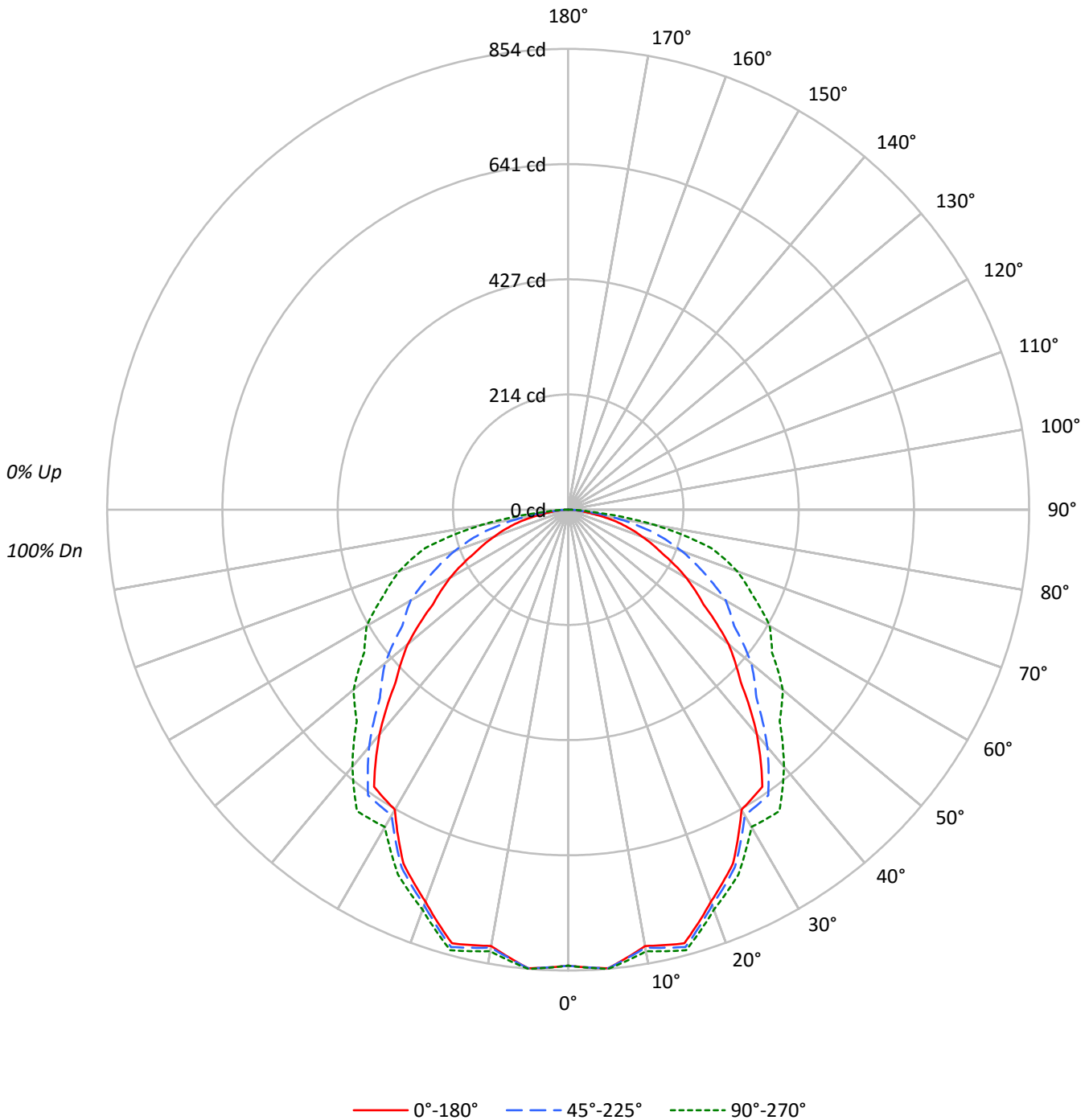
Test Method: LM-41-14  
Report Number: BAL 7901  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: 202-BX40  
Description: 2x2 DIRECT LUMINAIRE PERFORATED METAL WINGS W/ OVERLAY  
REFL=85% WATTS=72  
Light Source: -  
F40BX/SPX35/RS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 3150 (2 lamps)  
Luminaire Lumens: 2278.5 lumens  
Efficiency: 36.2%  
Efficacy: 31.6 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.22 / 1.31  
Luminous Opening: Rectangular (W 1.88' x L: 1.92' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 72  
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	43	43	43	43	42	42	42	42	40	40	40	38	38	38	37	37	37	36
1	39	38	36	35	38	37	35	34	35	34	33	34	33	32	32	32	31	30
2	36	33	30	28	35	32	30	28	31	29	27	30	28	27	28	27	26	25
3	33	29	26	23	32	28	25	23	27	25	23	26	24	22	25	23	22	21
4	30	25	22	20	29	25	22	20	24	21	19	23	21	19	22	21	19	18
5	27	23	20	17	27	22	19	17	22	19	17	21	19	17	20	18	16	16
6	25	21	17	15	25	20	17	15	20	17	15	19	17	15	18	16	15	14
7	24	19	16	13	23	18	15	13	18	15	13	17	15	13	17	15	13	12
8	22	17	14	12	21	17	14	12	16	14	12	16	13	12	15	13	12	11
9	21	16	13	11	20	15	13	11	15	12	11	15	12	11	14	12	11	10
10	19	14	12	10	19	14	12	10	14	11	10	14	11	10	13	11	10	9

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

	0°	45°	90°
0°	2517	2517	2517
5°	2551	2551	2554
10°	2483	2492	2514
15°	2566	2587	2606
20°	2450	2473	2501
25°	2376	2403	2452
30°	2208	2249	2335
35°	2280	2349	2480
40°	2115	2232	2419
45°	1904	2077	2334
50°	1798	2053	2405
55°	1589	1947	2394
60°	1507	2008	2568
65°	1360	1959	2664
70°	1272	1951	2900
75°	1174	1887	3153
80°	858	1561	2796
85°	581	752	1265



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	80.4	3.5	1.3
10°-20°	232.1	10.2	3.7
20°-30°	334.7	14.7	5.3
30°-40°	397.6	17.5	6.3
40°-50°	390.1	17.1	6.2
50°-60°	345.4	15.2	5.5
60°-70°	279.7	12.3	4.4
70°-80°	178.6	7.8	2.8
80°-90°	39.9	1.8	0.6
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°	647.2	28.4	10.3
0°-40°	1044.8	45.9	16.6
0°-60°	1780.2	78.1	28.3
0°-90°	2278.5	100.0	36.2
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°	2278.5	100.0	36.2

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	845	845	845	845	845	
5°	853	854	853	854	854	80
15°	832	835	839	842	845	230
25°	723	727	731	739	746	330
35°	627	633	646	669	682	382
45°	452	461	493	532	554	354
55°	306	325	375	431	461	280
65°	193	216	278	343	378	194
75°	102	114	164	233	274	105
85°	17	18	22	31	37	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	845	845	845	845	845
5°	853	854	853	854	854
10°	821	823	824	828	831
15°	832	835	839	842	845
20°	773	776	780	785	789
25°	723	727	731	739	746
30°	642	646	654	669	679
35°	627	633	646	669	682
40°	544	552	574	604	622
45°	452	461	493	532	554
50°	388	402	443	492	519
55°	306	325	375	431	461
60°	253	276	337	398	431
65°	193	216	278	343	378
70°	146	163	224	293	333
75°	102	114	164	233	274
80°	50	57	91	136	163
85°	17	18	22	31	37
90°	0	0	0	0	0

(END OF REPORT)