

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: 168p254

Luminaire Tested: **232R-3T8-ETG-2EB-DU**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 168p254  
Test Lab: METALUX LABORATORIES  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: 232R-3T8-ETG-2EB-DU  
Description: 2'X2' NEORAY FENESTRA RECESSED LUM, 3 LAMP T8, WITH WHITE  
PERFORATED BASKET, WHITE BAFFLE  
Light Source: THREE - F17T8/TL841 - 1300 LUMENS - 17 WATTS  
Ballast/Driver: B232IUNVHPB

**Summary**

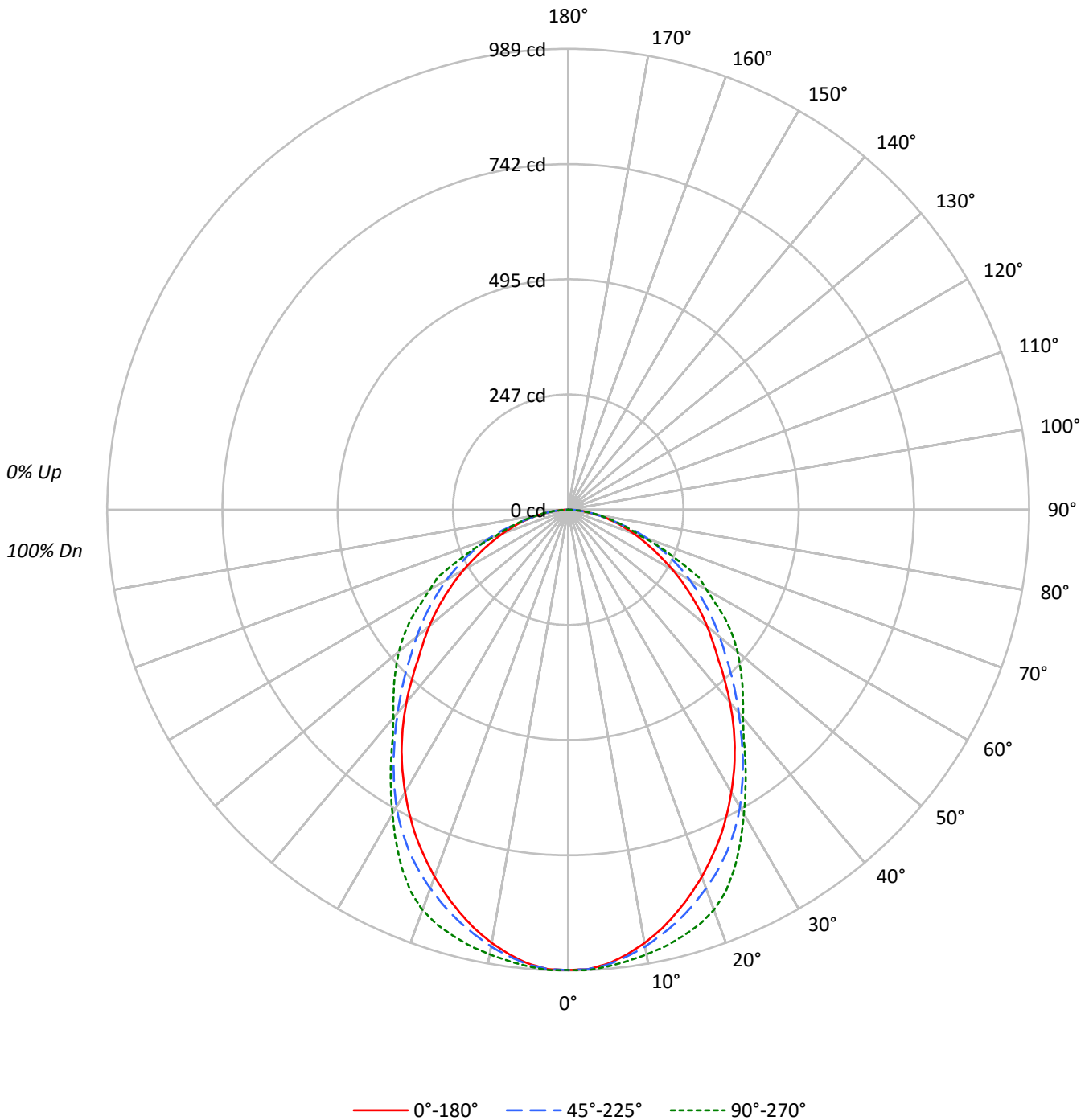
Lumens per Lamp: 1300 (3 lamps)  
Luminaire Lumens: 2218.2 lumens  
Efficiency: 56.9%  
Efficacy: 46.2 lumens/watt  
Spacing Criteria (0/90/45): 1.08 / 1.15 / 1.21  
Luminous Opening: Rectangular (W 1.98' x L: 1.94' x H: 0')  
CIE Type: Direct

Input Watts (W): 48  
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	68	68	68	68	66	66	66	66	63	63	63	61	61	61	58	58	58	57				
1	62	60	57	55	61	58	56	55	56	54	53	54	52	51	52	51	50	48				
2	57	53	49	46	56	52	48	45	50	47	44	48	45	43	46	44	42	41				
3	52	47	42	39	51	46	42	38	44	40	38	42	39	37	41	38	36	35				
4	48	42	37	33	47	41	36	33	39	36	32	38	35	32	37	34	32	30				
5	44	37	32	29	43	37	32	29	36	31	28	34	31	28	33	30	28	27				
6	41	34	29	25	40	33	29	25	32	28	25	31	28	25	30	27	25	24				
7	38	31	26	23	37	30	26	23	30	25	22	29	25	22	28	25	22	21				
8	36	28	24	20	35	28	23	20	27	23	20	26	23	20	26	22	20	19				
9	33	26	22	18	33	26	21	18	25	21	18	24	21	18	24	21	18	17				
10	31	24	20	17	31	24	20	17	23	19	17	23	19	17	22	19	17	16				

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

	0°	45°	90°
0°	2773	2773	2773
5°	2756	2761	2773
10°	2691	2714	2762
15°	2604	2653	2755
20°	2503	2584	2730
25°	2394	2503	2620
30°	2269	2389	2444
35°	2135	2238	2272
40°	1979	2085	2136
45°	1810	1953	2096
50°	1699	1852	2070
55°	1581	1772	2021
60°	1454	1690	1920
65°	1328	1601	1747
70°	1223	1486	1362
75°	1128	1193	1226
80°	1018	1018	1067
85°	870	934	870



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	92.7	4.2	2.4
10°-20°	258.2	11.6	6.6
20°-30°	370.4	16.7	9.5
30°-40°	404.3	18.2	10.4
40°-50°	380.6	17.2	9.8
50°-60°	326.1	14.7	8.4
60°-70°	234.7	10.6	6.0
70°-80°	118.8	5.4	3.0
80°-90°	32.4	1.5	0.8
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°	721.2	32.5	18.5
0°-40°	1125.5	50.7	28.9
0°-60°	1832.2	82.6	47.0
0°-90°	2218.2	100.0	56.9
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°	2218.2	100.0	56.9

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	988	988	988	988	988	
5°	978	978	980	982	984	92
15°	896	899	913	934	948	252
25°	773	779	808	833	846	355
35°	623	635	653	657	663	389
45°	456	472	492	511	528	354
55°	323	336	362	394	413	289
65°	200	218	241	261	263	199
75°	104	111	110	111	113	110
85°	27	29	29	27	27	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	988	988	988	988	988
2.5°	987	986	987	987	989
5°	978	978	980	982	984
7.5°	963	963	967	973	977
10°	944	945	952	962	969
12.5°	922	923	933	949	960
15°	896	899	913	934	948
17.5°	868	871	890	917	934
20°	838	842	865	895	914
22.5°	806	811	838	868	885
25°	773	779	808	833	846
27.5°	737	745	774	790	801
30°	700	709	737	745	754
32.5°	662	672	695	700	708
35°	623	635	653	657	663
37.5°	582	596	610	614	618
40°	540	556	569	573	583
42.5°	497	514	530	540	555
45°	456	472	492	511	528
47.5°	421	433	456	482	501
50°	389	400	424	454	474
52.5°	356	368	393	424	445
55°	323	336	362	394	413
57.5°	291	306	331	362	375
60°	259	276	301	327	342
62.5°	228	246	271	296	317
65°	200	218	241	261	263
67.5°	174	189	211	223	219
70°	149	162	181	176	166
72.5°	126	136	149	136	139
75°	104	111	110	111	113
77.5°	83	87	82	87	89
80°	63	65	63	66	66
82.5°	44	44	45	45	45
85°	27	29	29	27	27
87.5°	13	17	16	12	11
90°	0	0	0	0	0

(END OF REPORT)