

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: BALLABS TEST NO. 14544.1

Luminaire Tested: **7A-1248-1T8-S46**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: BALLABS TEST NO. 14544.1  
Test Lab: BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: 7A-1248-1T8-S46  
Description: 1/32W T8 LAMP 48x12x7"DIRECT RECESSED LUMINAIRE w/WHITE REFLECTOR & S46 TEXTURE WHITE ACRYLIC LENS w/REGRESS TRIM ADVANCE BALLAST #IOP-1S32-SC WATTS=27 REFL=89%  
Light Source: -  
F32T8/835  
Ballast/Driver: -

**Summary**

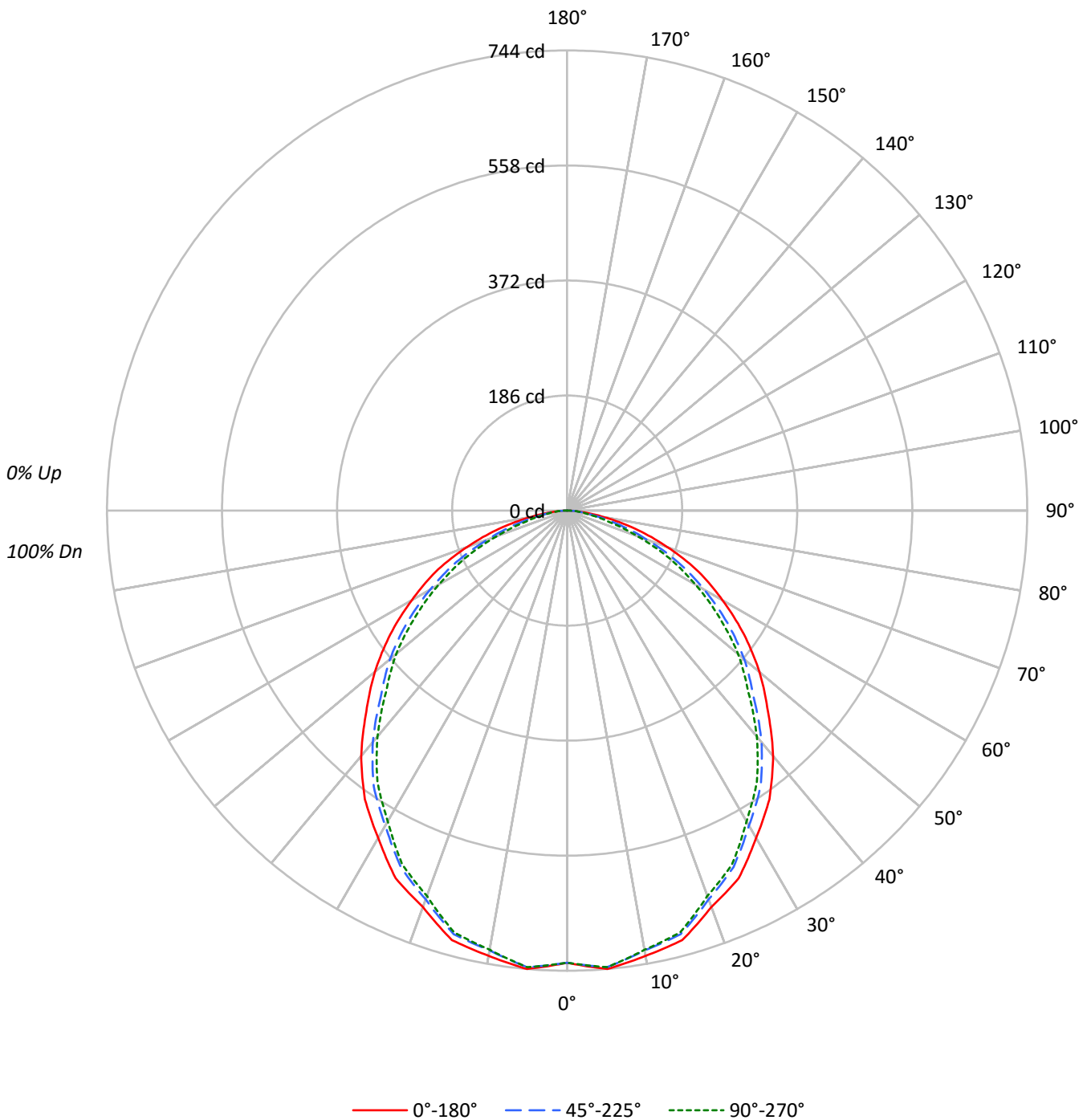
Lumens per Lamp: 2950 (1 lamp)  
Luminaire Lumens: 1838.4 lumens  
Efficiency: 62.3%  
Efficacy: 68.1 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.19 / 1.3  
Luminous Opening: Rectangular (W 0.93' x L: 3.93' x H: 0')  
CIE Type: Direct

Input Watts (W): 27  
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	74	74	74	74	72	72	72	72	69	69	69	66	66	66	64	64	64	62
1	68	65	63	61	67	64	62	60	61	60	58	59	57	56	57	56	54	53
2	62	58	53	50	61	56	53	50	54	51	48	52	50	47	50	48	46	45
3	57	51	46	42	56	50	45	42	48	44	41	46	43	40	45	42	40	38
4	52	45	40	36	51	44	39	36	43	39	35	41	38	35	40	37	34	33
5	48	41	35	31	47	40	35	31	39	34	31	37	33	30	36	33	30	29
6	45	37	31	27	44	36	31	27	35	30	27	34	30	27	33	29	27	25
7	42	33	28	24	40	33	28	24	32	27	24	31	27	24	30	26	24	22
8	39	30	25	22	38	30	25	22	29	25	22	28	24	21	28	24	21	20
9	36	28	23	20	35	28	23	20	27	23	19	26	22	19	26	22	19	18
10	34	26	21	18	33	26	21	18	25	21	18	24	20	18	24	20	18	16

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

	0°	45°	90°
0°	2161	2161	2161
5°	2208	2199	2199
10°	2195	2168	2165
15°	2201	2170	2161
20°	2146	2105	2086
25°	2140	2075	2059
30°	2086	2008	1980
35°	2058	1967	1931
40°	1999	1887	1841
45°	1919	1781	1731
50°	1868	1720	1661
55°	1799	1629	1547
60°	1715	1514	1419
65°	1644	1385	1273
70°	1487	1184	1046
75°	1302	960	788
80°	1005	698	613
85°	712	611	611



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	70.0	3.8	2.4
10°-20°	198.9	10.8	6.7
20°-30°	293.1	15.9	9.9
30°-40°	341.2	18.6	11.6
40°-50°	333.7	18.2	11.3
50°-60°	285.0	15.5	9.7
60°-70°	198.9	10.8	6.7
70°-80°	95.2	5.2	3.2
80°-90°	22.3	1.2	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°	562.0	30.6	19.1
0°-40°	903.3	49.1	30.6
0°-60°	1522.0	82.8	51.6
0°-90°	1838.4	100.0	62.3
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°	1838.4	100.0	62.3

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	731	731	731	731	731	
5°	744	742	741	741	741	70
15°	719	714	709	706	706	201
25°	656	646	636	633	631	301
35°	570	557	545	537	535	355
45°	459	440	426	417	414	356
55°	349	333	316	303	300	312
65°	235	217	198	185	182	231
75°	114	104	84	71	69	121
85°	21	18	18	18	18	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	731	731	731	731	731
5°	744	742	741	741	741
10°	731	726	722	721	721
15°	719	714	709	706	706
20°	682	676	669	664	663
25°	656	646	636	633	631
30°	611	600	588	581	580
35°	570	557	545	537	535
40°	518	503	489	479	477
45°	459	440	426	417	414
50°	406	389	374	361	361
55°	349	333	316	303	300
60°	290	273	256	243	240
65°	235	217	198	185	182
70°	172	157	137	122	121
75°	114	104	84	71	69
80°	59	54	41	38	36
85°	21	18	18	18	18
90°	0	0	0	0	0

(END OF REPORT)