

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. 11965.0

Luminaire Tested: **S294 2/54T5HO S17A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: BALLABS TEST NO. 11965.0  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S294 2/54T5HO S17A  
Description: 2/54W T5HO LAMP 2x4'RECESSED GRID MOUNT LUMINAIRE  
Light Source: -  
FP54WT5HO/835  
Ballast/Driver: UNIVERSAL BALLAST #B254PUNV-D WATTS=111 REFL=92%

**Summary**

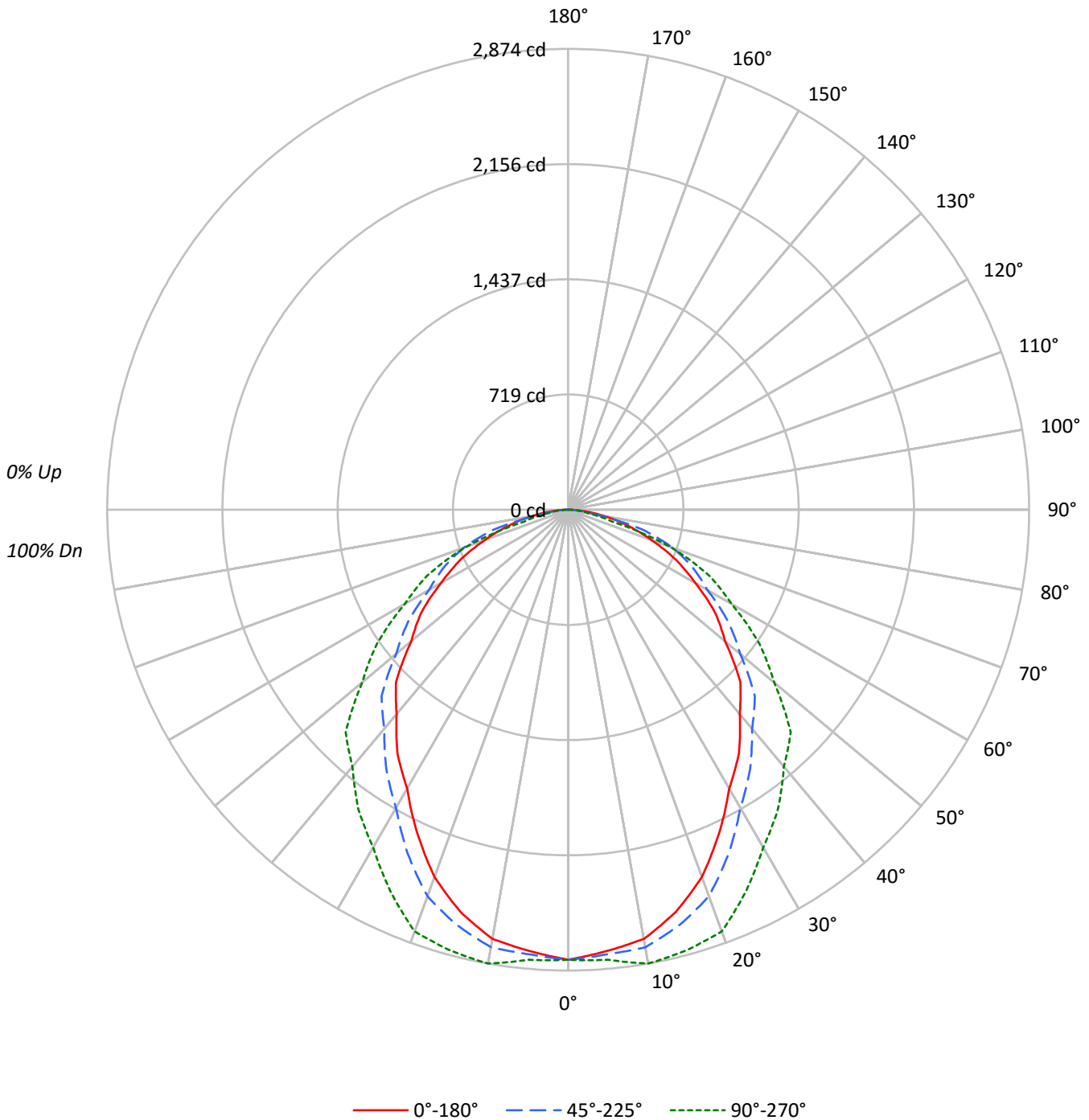
Lumens per Lamp: 5000 (2 lamps)  
Luminaire Lumens: 7141.4 lumens  
Efficiency: 71.4%  
Efficacy: 64.3 lumens/watt  
Spacing Criteria (0/90/45): 1.09 / 1.28 / 1.29  
Luminous Opening: Rectangular (W 1.92' x L: 3.92' x H: 0')  
CIE Type: Direct

Input Watts (W): 111  
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	85	85	85	85	83	83	83	83	79	79	79	76	76	76	73	73	73	71
1	78	75	72	69	76	73	70	68	70	68	66	67	66	64	65	63	62	60
2	71	65	61	57	69	64	60	56	62	58	55	59	56	53	57	55	52	51
3	65	58	52	47	63	57	51	47	54	50	46	52	49	45	51	47	45	43
4	60	51	45	40	58	50	45	40	48	43	40	47	42	39	45	42	38	37
5	55	46	40	35	53	45	39	35	44	38	34	42	38	34	41	37	34	32
6	51	41	35	31	49	41	35	30	39	34	30	38	34	30	37	33	30	28
7	47	38	31	27	46	37	31	27	36	31	27	35	30	27	34	30	26	25
8	44	34	28	24	43	34	28	24	33	28	24	32	27	24	31	27	24	22
9	41	32	26	22	40	31	26	22	30	25	22	30	25	22	29	25	22	20
10	39	29	24	20	38	29	23	20	28	23	20	27	23	20	27	23	20	18

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

	0°	45°	90°
0°	4024	4024	4024
5°	3976	4005	4055
10°	3956	4033	4183
15°	3853	3980	4222
20°	3718	3913	4270
25°	3521	3744	4150
30°	3324	3554	4026
35°	3246	3458	3990
40°	3114	3337	3915
45°	3075	3337	3977
50°	2848	3124	3738
55°	2794	3047	3636
60°	2626	2873	3372
65°	2517	2910	3283
70°	2314	2905	2833
75°	2116	2653	1567
80°	1882	1412	1081
85°	1513	1102	921



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	266.0	3.7	2.7
10°-20°	760.6	10.7	7.6
20°-30°	1099.3	15.4	11.0
30°-40°	1258.3	17.6	12.6
40°-50°	1280.6	17.9	12.8
50°-60°	1109.0	15.5	11.1
60°-70°	841.5	11.8	8.4
70°-80°	434.8	6.1	4.3
80°-90°	91.3	1.3	0.9
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°	2126.0	29.8	21.3
0°-40°	3384.2	47.4	33.8
0°-60°	5773.8	80.9	57.7
0°-90°	7141.4	100.0	71.4
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°	7141.4	100.0	71.4

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2807	2807	2807	2807	2807	
5°	2763	2765	2783	2805	2818	263
15°	2596	2617	2682	2774	2845	730
25°	2226	2261	2367	2501	2624	1025
35°	1855	1894	1976	2128	2280	1156
45°	1517	1569	1646	1791	1962	1154
55°	1118	1157	1219	1333	1455	991
65°	742	791	858	929	968	731
75°	382	443	479	346	283	407
85°	92	82	67	62	56	112
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2807	2807	2807	2807	2807
5°	2763	2765	2783	2805	2818
10°	2718	2729	2771	2832	2874
15°	2596	2617	2682	2774	2845
20°	2437	2469	2565	2692	2799
25°	2226	2261	2367	2501	2624
30°	2008	2044	2147	2291	2432
35°	1855	1894	1976	2128	2280
40°	1664	1709	1783	1932	2092
45°	1517	1569	1646	1791	1962
50°	1277	1325	1401	1531	1676
55°	1118	1157	1219	1333	1455
60°	916	959	1002	1096	1176
65°	742	791	858	929	968
70°	552	612	693	706	676
75°	382	443	479	346	283
80°	228	280	171	141	131
85°	92	82	67	62	56
90°	0	0	0	0	0

(END OF REPORT)