

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. 11964.0

Luminaire Tested: **S294 2/54T5HO S17**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: BALLABS TEST NO. 11964.0  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S294 2/54T5HO S17  
Description: 2/54W T5HO LAMP 2x4'RECESSED GRID MOUNT LUMINAIRE  
Light Source: -  
FP54WT5HO/835  
Ballast/Driver: UNIVERSAL BALLAST #B254PUNV-D WATTS=113 REFL=92%

**Summary**

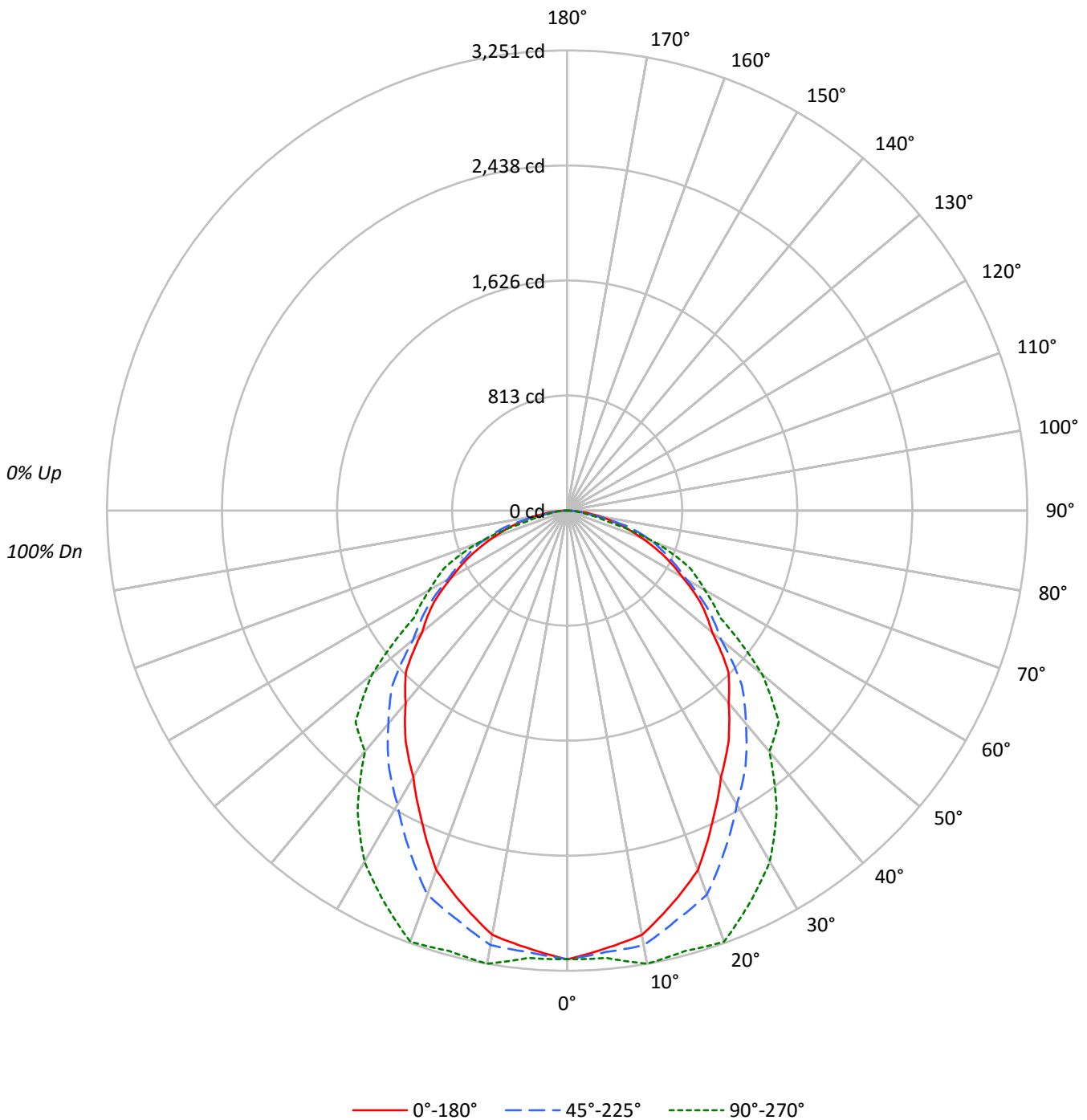
Lumens per Lamp: 5000 (2 lamps)  
Luminaire Lumens: 7581.7 lumens  
Efficiency: 75.8%  
Efficacy: 67.1 lumens/watt  
Spacing Criteria (0/90/45): 1.05 / 1.3 / 1.26  
Luminous Opening: Rectangular (W 1.92' x L: 3.92' x H: 0')  
CIE Type: Direct

Input Watts (W): 113  
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	90	90	90	90	88	88	88	88	84	84	84	81	81	81	77	77	77	76
1	83	80	77	74	81	78	75	73	75	72	70	72	70	68	69	68	66	65
2	76	70	65	61	74	69	64	60	66	62	59	63	60	58	61	59	56	55
3	70	62	56	51	68	61	55	51	58	54	50	56	52	49	55	51	48	47
4	64	55	49	44	62	54	48	44	52	47	43	51	46	42	49	45	42	40
5	59	50	43	38	57	49	43	38	47	42	38	46	41	37	44	40	37	35
6	55	45	38	34	53	44	38	33	43	37	33	42	37	33	40	36	33	31
7	51	41	34	30	49	40	34	30	39	34	30	38	33	29	37	33	29	28
8	47	37	31	27	46	37	31	27	36	30	27	35	30	26	34	30	26	25
9	44	34	28	24	43	34	28	24	33	28	24	32	27	24	32	27	24	22
10	42	32	26	22	41	31	26	22	31	26	22	30	25	22	29	25	22	20

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

	0°	45°	90°
0°	4544	4544	4544
5°	4468	4505	4564
10°	4431	4537	4732
15°	4265	4443	4780
20°	4122	4404	4944
25°	3839	4177	4832
30°	3599	3969	4741
35°	3479	3848	4517
40°	3323	3677	4158
45°	3266	3542	4286
50°	2984	3167	4008
55°	2902	3039	3304
60°	2704	2795	3222
65°	2551	2703	3239
70°	2322	2703	2821
75°	2127	2503	1601
80°	1932	1412	1106
85°	1563	1135	921



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	299.5	4.0	3.0
10°-20°	854.1	11.3	8.5
20°-30°	1236.7	16.3	12.4
30°-40°	1391.2	18.3	13.9
40°-50°	1359.7	17.9	13.6
50°-60°	1113.9	14.7	11.1
60°-70°	814.4	10.7	8.1
70°-80°	420.8	5.5	4.2
80°-90°	91.5	1.2	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°	2390.3	31.5	23.9
0°-40°	3781.5	49.9	37.8
0°-60°	6255.1	82.5	62.6
0°-90°	7581.7	100.0	75.8
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°	7581.7	100.0	75.8

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3170	3170	3170	3170	3170	
5°	3105	3109	3131	3160	3172	295
15°	2874	2901	2994	3124	3221	811
25°	2427	2475	2641	2865	3055	1120
35°	1988	2040	2199	2419	2581	1241
45°	1611	1682	1747	1852	2114	1223
55°	1161	1209	1216	1287	1322	1030
65°	752	783	797	880	955	743
75°	384	419	452	341	289	411
85°	95	83	69	63	56	115
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3170	3170	3170	3170	3170
5°	3105	3109	3131	3160	3172
10°	3044	3060	3117	3199	3251
15°	2874	2901	2994	3124	3221
20°	2702	2745	2887	3085	3241
25°	2427	2475	2641	2865	3055
30°	2174	2224	2398	2654	2864
35°	1988	2040	2199	2419	2581
40°	1776	1836	1965	2073	2222
45°	1611	1682	1747	1852	2114
50°	1338	1401	1420	1624	1797
55°	1161	1209	1216	1287	1322
60°	943	985	975	1013	1124
65°	752	783	797	880	955
70°	554	596	645	669	673
75°	384	419	452	341	289
80°	234	264	171	145	134
85°	95	83	69	63	56
90°	0	0	0	0	0

(END OF REPORT)