

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. 11966.0

Luminaire Tested: **S294 3/28T5 S17**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: BALLABS TEST NO. 11966.0
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S294 3/28T5 S17
Description: 3/28W T5 LAMP 2x4'RECESSED GRID MOUNT LUMINAIRE
Light Source: -
FP28WT5/835
Ballast/Driver: 2 UNIVERSAL BALLAST #B228PUNV-C WATTS=97 REFL=92%

Summary

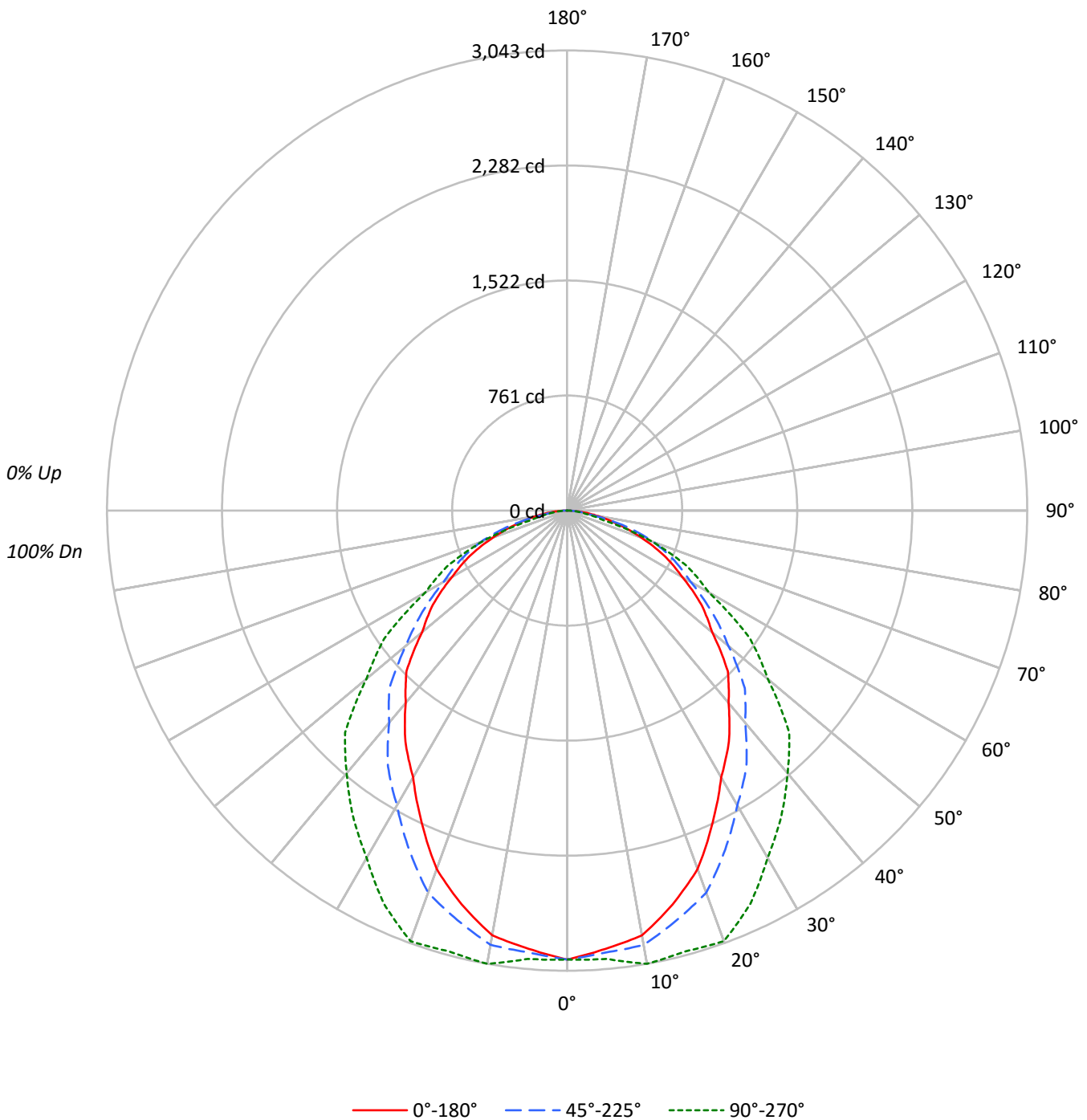
Lumens per Lamp: 2900 (3 lamps)
Luminaire Lumens: 7179.3 lumens
Efficiency: 82.5%
Efficacy: 74.0 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.31 / 1.26
Luminous Opening: Rectangular (W 1.92' x L: 3.92' x H: 0')
CIE Type: Direct

Input Watts (W): 97
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	50	30	10	50	30	10	0																			
RCR																																														
0	98	98	98	98	96	96	96	96	92	92	92	88	88	88	84	84	84	83																												
1	90	87	83	80	88	85	82	79	81	79	77	78	76	74	75	74	72	70																												
2	83	76	71	66	81	75	70	66	72	68	64	69	66	63	67	64	61	60																												
3	76	67	61	56	74	66	60	55	64	59	54	61	57	53	59	56	53	51																												
4	70	60	53	48	68	59	52	47	57	51	47	55	50	46	53	49	46	44																												
5	64	54	47	41	62	53	46	41	51	45	41	50	44	40	48	44	40	38																												
6	59	49	42	36	58	48	41	36	46	40	36	45	40	36	44	39	35	34																												
7	55	44	37	32	54	44	37	32	42	36	32	41	36	32	40	35	32	30																												
8	51	41	34	29	50	40	33	29	39	33	29	38	32	29	37	32	28	27																												
9	48	37	31	26	47	37	30	26	36	30	26	35	30	26	34	29	26	24																												
10	45	34	28	24	44	34	28	24	33	28	24	32	27	24	32	27	24	22																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4256	4256	4256
5°	4186	4220	4282
10°	4151	4245	4429
15°	4001	4160	4479
20°	3849	4102	4622
25°	3600	3911	4536
30°	3372	3726	4390
35°	3264	3615	4321
40°	3108	3426	4244
45°	3045	3367	4211
50°	2790	3104	3865
55°	2709	2919	3691
60°	2520	2701	3102
65°	2412	2652	2978
70°	2175	2552	2498
75°	1905	2210	1412
80°	1676	1255	1048
85°	1398	1069	888



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	280.5	3.9	3.2
10°-20°	799.0	11.1	9.2
20°-30°	1157.0	16.1	13.3
30°-40°	1311.9	18.3	15.1
40°-50°	1305.7	18.2	15.0
50°-60°	1084.8	15.1	12.5
60°-70°	773.9	10.8	8.9
70°-80°	382.7	5.3	4.4
80°-90°	83.8	1.2	1.0
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°	2236.5	31.2	25.7
0°-40°	3548.3	49.4	40.8
0°-60°	5938.8	82.7	68.3
0°-90°	7179.3	100.0	82.5
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°	7179.3	100.0	82.5

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2969	2969	2969	2969	2969	
5°	2909	2914	2933	2961	2976	276
15°	2696	2720	2803	2923	3018	759
25°	2276	2318	2473	2692	2868	1049
35°	1865	1915	2066	2261	2469	1163
45°	1502	1572	1661	1866	2077	1142
55°	1084	1133	1168	1327	1477	961
65°	711	754	782	828	878	698
75°	344	399	399	291	255	372
85°	85	73	65	59	54	102
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2969	2969	2969	2969	2969
5°	2909	2914	2933	2961	2976
10°	2852	2866	2916	2992	3043
15°	2696	2720	2803	2923	3018
20°	2523	2561	2689	2876	3030
25°	2276	2318	2473	2692	2868
30°	2037	2081	2251	2469	2652
35°	1865	1915	2066	2261	2469
40°	1661	1718	1831	2035	2268
45°	1502	1572	1661	1866	2077
50°	1251	1314	1392	1531	1733
55°	1084	1133	1168	1327	1477
60°	879	921	942	1014	1082
65°	711	754	782	828	878
70°	519	564	609	601	596
75°	344	399	399	291	255
80°	203	245	152	137	127
85°	85	73	65	59	54
90°	0	0	0	0	0

(END OF REPORT)