

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. 11900.0

Luminaire Tested: **194/1T5 S17**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: BALLABS TEST NO. 11900.0
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: 194/1T5 S17
Description: 1/28W T5 1x4'RECESSED GRID MNT LUMINAIRE w/WHITE REFL
Light Source: -
FP28T5/835
Ballast/Driver: UNIVERSAL BALLAST #B228PUNV-C WATTS=34 REFL=94%

Summary

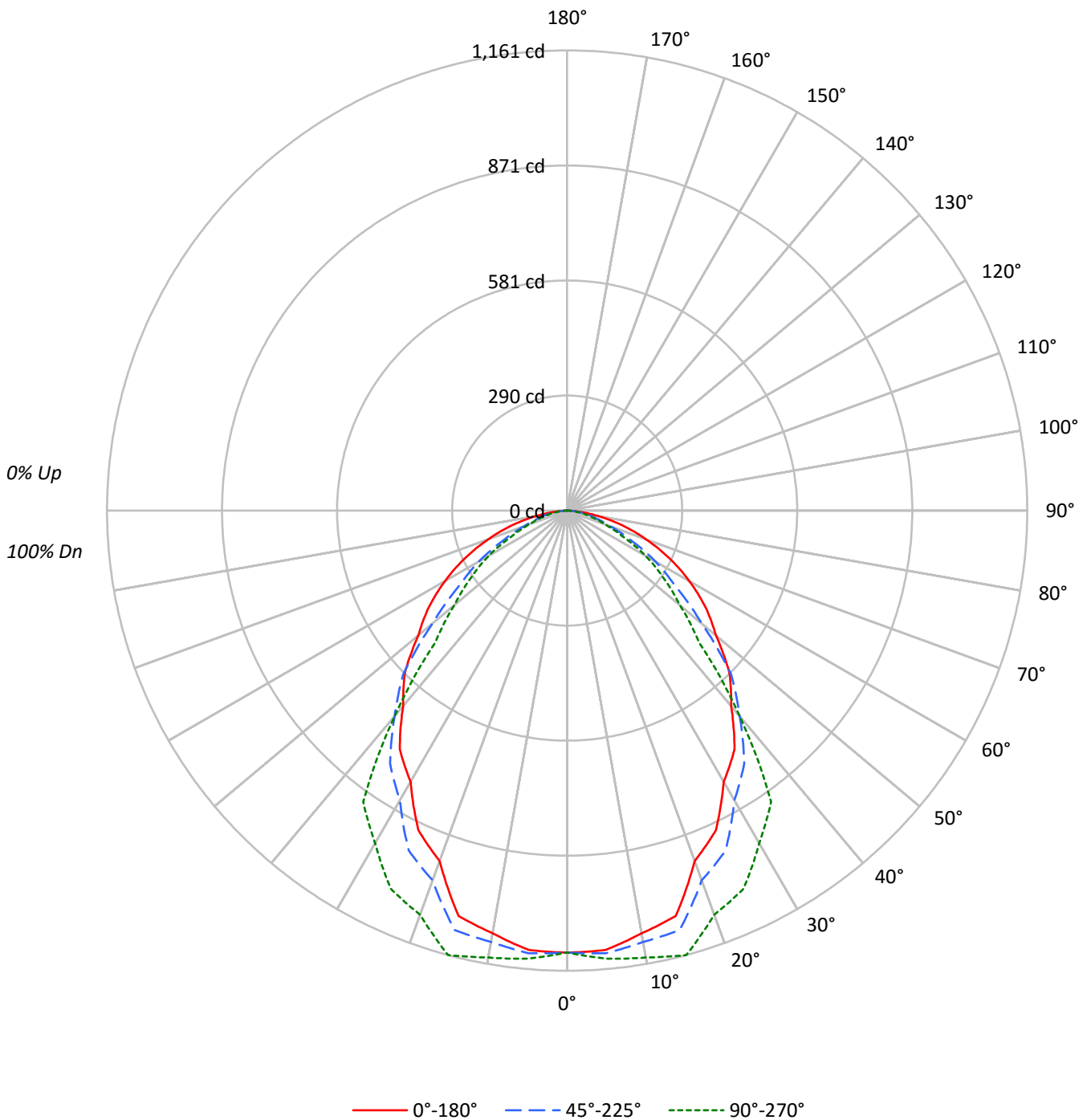
Lumens per Lamp: 2900 (1 lamp)
Luminaire Lumens: 2396.4 lumens
Efficiency: 82.6%
Efficacy: 70.5 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.28 / 1.24
Luminous Opening: Rectangular (W 0.9' x L: 3.92' x H: 0')
CIE Type: Direct

Input Watts (W): 34
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									
RC	80					70					50					30					10				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10		
RCR																									
0	98	98	98	98	96	96	96	96	92	92	92	88	88	88	84	84	84	83							
1	91	88	85	82	89	86	83	80	82	80	78	79	77	76	76	75	73	72							
2	84	78	73	69	82	76	72	68	73	70	66	71	68	65	68	66	63	62							
3	77	69	63	58	75	68	63	58	66	61	57	64	59	56	61	58	55	53							
4	71	62	56	51	69	61	55	50	59	54	50	57	53	49	56	52	48	47							
5	66	56	49	44	64	55	49	44	54	48	44	52	47	43	51	46	43	41							
6	61	51	44	39	60	50	44	39	49	43	39	48	42	38	46	42	38	37							
7	57	47	40	35	56	46	40	35	45	39	35	44	38	35	43	38	34	33							
8	53	43	36	32	52	42	36	32	41	36	31	40	35	31	39	35	31	30							
9	50	40	33	29	49	39	33	29	38	33	29	37	32	28	36	32	28	27							
10	47	37	30	26	46	36	30	26	35	30	26	35	30	26	34	29	26	25							

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3420	3420	3420
5°	3427	3451	3494
10°	3373	3441	3566
15°	3362	3480	3686
20°	3071	3241	3541
25°	3008	3201	3563
30°	2798	2989	3432
35°	2756	2917	3358
40°	2578	2710	2710
45°	2511	2537	2043
50°	2338	2114	1775
55°	2283	1786	1588
60°	2184	1576	1405
65°	2068	1284	1125
70°	1892	1031	906
75°	1706	889	770
80°	1395	777	618
85°	985	669	457



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	106.6	4.4	3.7
10°-20°	304.7	12.7	10.5
20°-30°	435.3	18.2	15.0
30°-40°	488.4	20.4	16.8
40°-50°	424.1	17.7	14.6
50°-60°	317.4	13.2	10.9
60°-70°	202.2	8.4	7.0
70°-80°	94.4	3.9	3.3
80°-90°	23.4	1.0	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°	846.5	35.3	29.2
0°-40°	1334.9	55.7	46.0
0°-60°	2076.4	86.6	71.6
0°-90°	2396.4	100.0	82.6
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°	2396.4	100.0	82.6

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1115	1115	1115	1115	1115	
5°	1113	1114	1121	1132	1135	105
15°	1059	1070	1096	1136	1161	292
25°	889	906	946	1005	1053	404
35°	736	747	779	847	897	455
45°	579	589	585	495	471	442
55°	427	418	334	297	297	380
65°	285	257	177	152	155	281
75°	144	101	75	67	65	152
85°	28	20	19	16	13	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1115	1115	1115	1115	1115
5°	1113	1114	1121	1132	1135
10°	1083	1087	1105	1130	1145
15°	1059	1070	1096	1136	1161
20°	941	956	993	1045	1085
25°	889	906	946	1005	1053
30°	790	804	844	909	969
35°	736	747	779	847	897
40°	644	656	677	678	677
45°	579	589	585	495	471
50°	490	493	443	376	372
55°	427	418	334	297	297
60°	356	345	257	220	229
65°	285	257	177	152	155
70°	211	172	115	101	101
75°	144	101	75	67	65
80°	79	53	44	39	35
85°	28	20	19	16	13
90°	0	0	0	0	0

(END OF REPORT)