

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. 12911.0

Luminaire Tested: **194R-2T8-ETG-1-EB-SI-S17B**

Issue Date: 3/3/2020

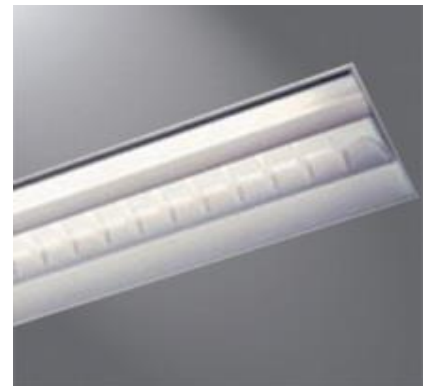
Test Information

Test Method: LM-41-14
Report Number: BALLABS TEST NO. 12911.0
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: 194R-2T8-ETG-1-EB-SI-S17B
Description: 2/32W T8 1x4'DIRECT RECESSED GRID LUMINAIRE w/WHITE REFL
Light Source: -
F32WT8/835/RS
Ballast/Driver: UNIVERSAL BALLAST #B232IUNVHP-B WATTS=55 STEEL REFL=93%

Summary

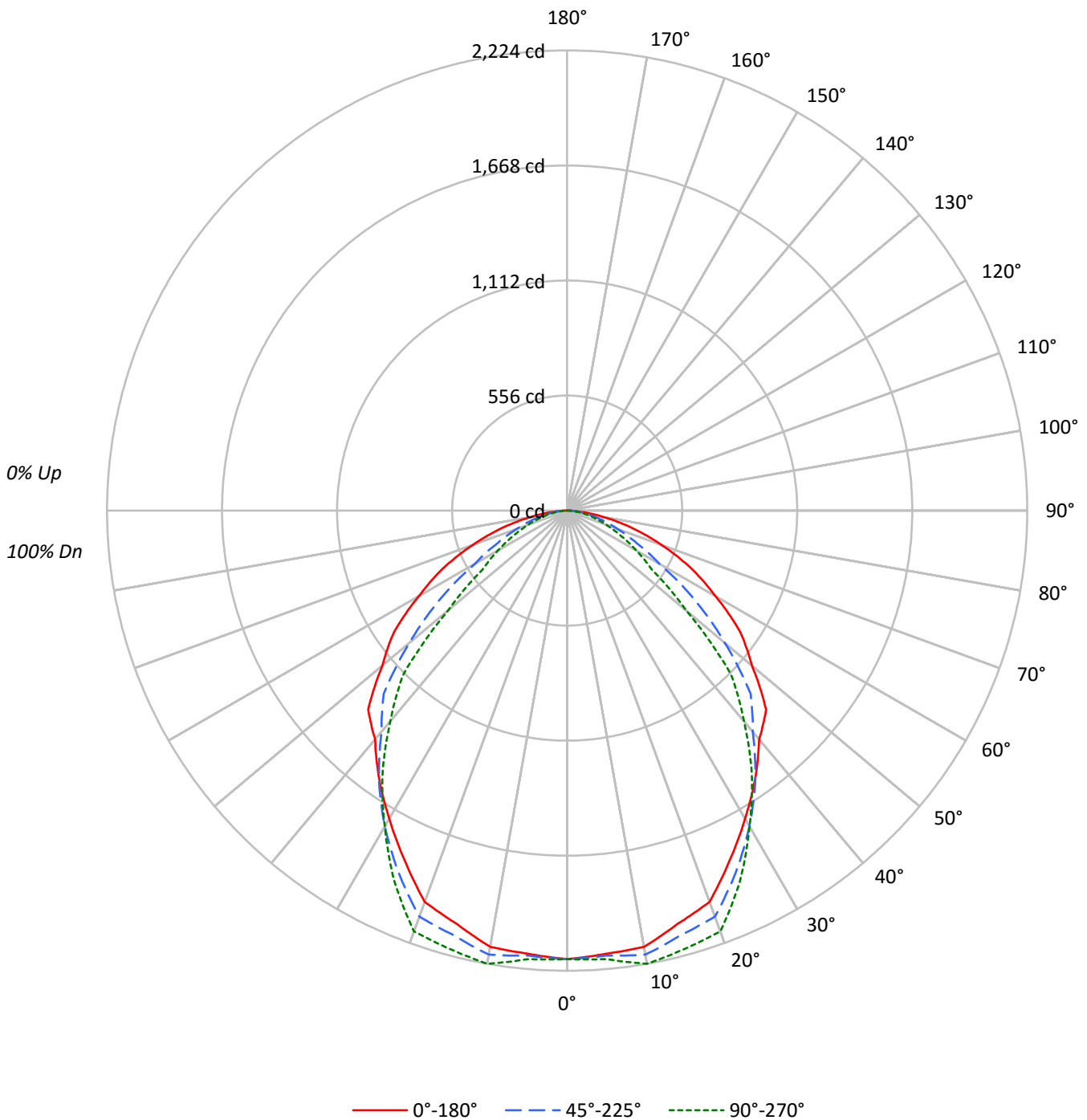
Lumens per Lamp: 2950 (2 lamps)
Luminaire Lumens: 5002.1 lumens
Efficiency: 84.8%
Efficacy: 90.9 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.2 / 1.28
Luminous Opening: Rectangular (W 0.9' x L: 3.92' x H: 0')
CIE Type: Direct

Input Watts (W): 55
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	101	101	101	101	99	99	99	99	94	94	94	90	90	90	87	87	87	85
1	93	90	87	84	91	88	85	82	84	82	80	81	79	77	78	76	75	73
2	86	79	74	70	84	78	73	69	75	71	67	72	69	66	70	67	65	63
3	79	71	64	59	77	69	64	59	67	62	58	65	60	57	63	59	56	54
4	73	63	56	51	71	62	56	51	60	55	50	58	53	50	56	52	49	47
5	67	57	50	45	65	56	49	44	54	49	44	53	48	44	51	47	43	41
6	62	52	45	40	61	51	44	39	49	43	39	48	43	39	47	42	38	37
7	58	47	40	35	57	46	40	35	45	39	35	44	39	35	43	38	34	33
8	54	43	36	32	53	43	36	32	42	36	31	41	35	31	40	35	31	30
9	51	40	33	29	50	39	33	29	38	33	29	38	32	28	37	32	28	27
10	48	37	30	26	47	36	30	26	36	30	26	35	30	26	34	29	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6649	6649	6649
5°	6619	6647	6699
10°	6668	6786	6926
15°	6563	6744	6963
20°	6567	6815	7063
25°	6301	6528	6690
30°	6088	6240	6244
35°	5931	5938	5826
40°	5781	5589	5325
45°	5899	5439	4858
50°	5563	4747	3588
55°	5459	4021	2684
60°	5079	3165	2368
65°	4804	2678	2061
70°	4358	2314	1802
75°	3839	2014	1564
80°	3126	1696	1307
85°	2358	1443	1020



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	207.1	4.1	3.5
10°-20°	602.7	12.0	10.2
20°-30°	885.3	17.7	15.0
30°-40°	986.1	19.7	16.7
40°-50°	940.1	18.8	15.9
50°-60°	686.8	13.7	11.6
60°-70°	432.9	8.7	7.3
70°-80°	208.7	4.2	3.5
80°-90°	52.5	1.0	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°	1695.1	33.9	28.7
0°-40°	2681.1	53.6	45.4
0°-60°	4308.0	86.1	73.0
0°-90°	5002.1	100.0	84.8
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°	5002.1	100.0	84.8

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2168	2168	2168	2168	2168	
5°	2150	2152	2159	2171	2176	205
15°	2067	2085	2124	2167	2193	586
25°	1862	1893	1929	1950	1977	859
35°	1584	1613	1586	1543	1556	992
45°	1360	1366	1254	1144	1120	1030
55°	1021	982	752	547	502	903
65°	662	600	369	302	284	653
75°	324	224	170	144	132	346
85°	67	50	41	34	29	85
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2168	2168	2168	2168	2168
5°	2150	2152	2159	2171	2176
10°	2141	2152	2179	2209	2224
15°	2067	2085	2124	2167	2193
20°	2012	2038	2088	2131	2164
25°	1862	1893	1929	1950	1977
30°	1719	1751	1762	1746	1763
35°	1584	1613	1586	1543	1556
40°	1444	1467	1396	1330	1330
45°	1360	1366	1254	1144	1120
50°	1166	1142	995	812	752
55°	1021	982	752	547	502
60°	828	783	516	398	386
65°	662	600	369	302	284
70°	486	391	258	215	201
75°	324	224	170	144	132
80°	177	122	96	82	74
85°	67	50	41	34	29
90°	0	0	0	0	0

(END OF REPORT)