

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. 13069.0

Luminaire Tested: **194R-2T8-ETG-1-EB-SI-S17G**

Issue Date: 3/3/2020

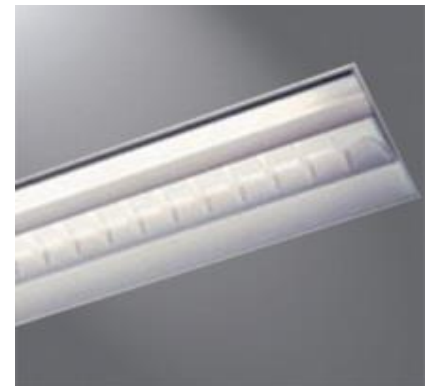
Test Information

Test Method: LM-41-14
Report Number: BALLABS TEST NO. 13069.0
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-S17G
Description: 2/32W T8 1x4'DIRECT RECESSED GRID LUMINAIRE w/WHITE REFL
Light Source: -
F32T8/835/RS
Ballast/Driver: UNIVERSAL BALLAST #B232IUNVHP-B WATTS=54 REFL=93%

Summary

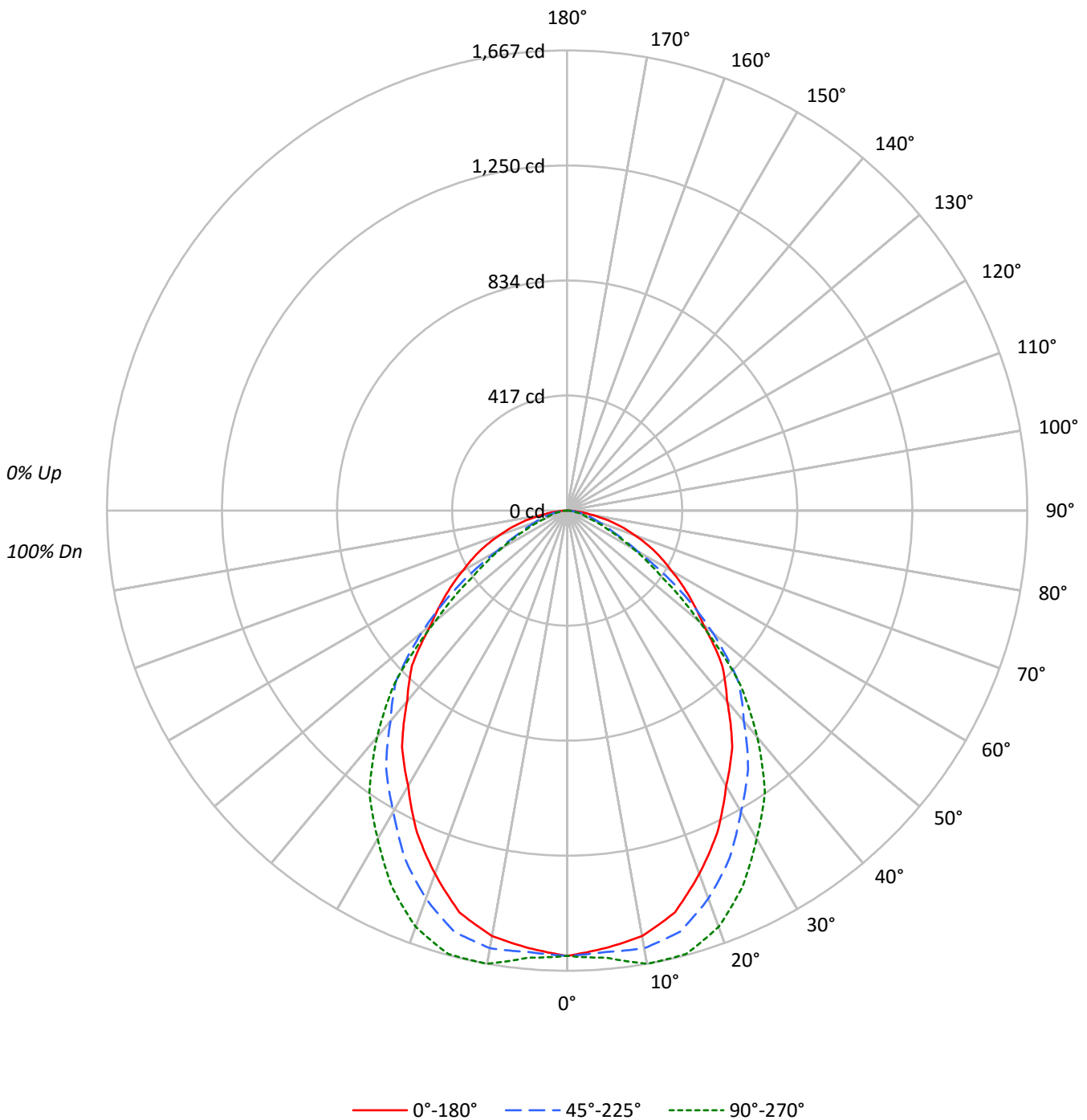
Lumens per Lamp: 2950 (2 lamps)
Luminaire Lumens: 3398.4 lumens
Efficiency: 57.6%
Efficacy: 62.9 lumens/watt
Spacing Criteria (0/90/45): 1.09 / 1.25 / 1.25
Luminous Opening: Rectangular (W 0.9' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 54
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	69	69	69	69	67	67	67	67	64	64	64	61	61	61	59	59	59	58
1	64	61	59	58	62	60	58	57	58	56	55	56	54	53	54	53	52	50
2	59	55	51	49	57	54	51	48	52	49	47	50	48	46	48	46	45	44
3	54	49	45	42	53	48	44	41	46	43	41	45	42	40	44	41	39	38
4	50	44	40	36	49	43	39	36	42	38	35	41	37	35	39	37	35	33
5	46	40	35	32	45	39	35	32	38	34	31	37	34	31	36	33	31	29
6	43	36	32	28	42	36	31	28	35	31	28	34	30	28	33	30	27	26
7	40	33	28	25	39	33	28	25	32	28	25	31	27	25	30	27	25	24
8	38	30	26	23	37	30	26	23	29	25	23	29	25	22	28	25	22	21
9	35	28	24	21	34	28	23	21	27	23	20	26	23	20	26	23	20	19
10	33	26	22	19	32	26	22	19	25	21	19	25	21	19	24	21	19	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4974	4974	4974
5°	4925	4968	5033
10°	4900	5041	5219
15°	4811	5041	5309
20°	4594	4909	5267
25°	4379	4733	5114
30°	4102	4483	4889
35°	3926	4303	4702
40°	3631	4009	4311
45°	3467	3829	3851
50°	3089	3300	2989
55°	2898	2634	2247
60°	2695	1795	1708
65°	2561	1342	1204
70°	2353	1118	802
75°	2133	953	703
80°	1669	746	550
85°	1168	672	495



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	153.7	4.5	2.6
10°-20°	443.2	13.0	7.5
20°-30°	638.5	18.8	10.8
30°-40°	710.7	20.9	12.0
40°-50°	648.8	19.1	11.0
50°-60°	437.8	12.9	7.4
60°-70°	239.9	7.1	4.1
70°-80°	101.9	3.0	1.7
80°-90°	23.9	0.7	0.4
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°	1235.4	36.4	20.9
0°-40°	1946.1	57.3	33.0
0°-60°	3032.7	89.2	51.4
0°-90°	3398.4	100.0	57.6
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°	3398.4	100.0	57.6

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1613	1613	1613	1613	1613	
5°	1591	1595	1605	1619	1626	151
15°	1507	1530	1579	1631	1663	422
25°	1287	1331	1391	1447	1503	590
35°	1043	1097	1143	1192	1249	648
45°	795	853	878	860	883	605
55°	539	562	490	397	418	483
65°	351	342	184	170	165	347
75°	179	101	80	70	59	188
85°	33	22	19	15	14	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1613	1613	1613	1613	1613
5°	1591	1595	1605	1619	1626
10°	1565	1577	1610	1647	1667
15°	1507	1530	1579	1631	1663
20°	1400	1435	1496	1558	1605
25°	1287	1331	1391	1447	1503
30°	1152	1205	1259	1314	1373
35°	1043	1097	1143	1192	1249
40°	902	960	996	1029	1071
45°	795	853	878	860	883
50°	644	690	688	620	623
55°	539	562	490	397	418
60°	437	447	291	265	277
65°	351	342	184	170	165
70°	261	210	124	105	89
75°	179	101	80	70	59
80°	94	52	42	36	31
85°	33	22	19	15	14
90°	0	0	0	0	0

(END OF REPORT)