

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. 13067.0

Luminaire Tested: **194R-2T8-ETG-1-EB-SI-S17A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: BALLABS TEST NO. 13067.0
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-S17A
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 STEEL REFL=93%

Summary

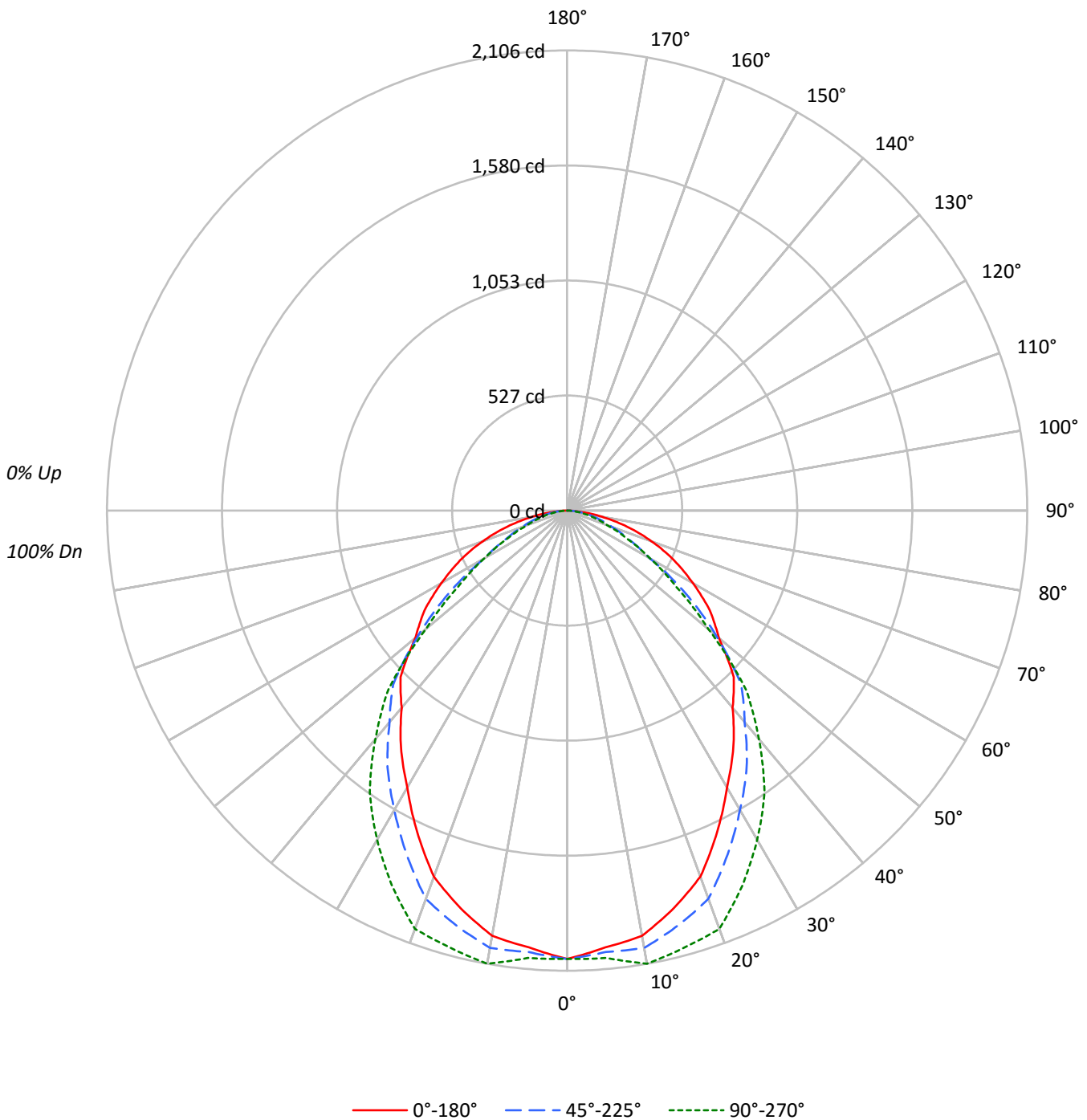
Lumens per Lamp: 2950 (2 lamps)
Luminaire Lumens: 4527.2 lumens
Efficiency: 76.7%
Efficacy: 83.8 lumens/watt
Spacing Criteria (0/90/45): 1.09 / 1.25 / 1.25
Luminous Opening: Rectangular (W 0.9' x L: 3.9' x H: 0')
CIE Type: Direct

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	91	91	91	91	89	89	89	89	85	85	85	82	82	82	78	78	78	77
1	85	81	78	76	82	80	77	75	76	74	72	73	72	70	71	69	68	66
2	78	72	67	63	76	71	66	63	68	64	61	66	63	60	63	61	59	57
3	71	64	58	54	70	63	58	53	61	56	53	59	55	52	57	54	51	49
4	66	57	51	47	64	57	51	46	55	50	46	53	49	45	51	48	44	43
5	61	52	45	41	59	51	45	41	49	44	40	48	43	40	47	43	39	38
6	57	47	41	36	55	46	40	36	45	40	36	44	39	35	43	38	35	34
7	53	43	37	32	51	42	36	32	41	36	32	40	35	32	39	35	31	30
8	49	39	33	29	48	39	33	29	38	33	29	37	32	29	36	32	28	27
9	46	36	30	26	45	36	30	26	35	30	26	34	29	26	33	29	26	24
10	43	34	28	24	42	33	28	24	32	27	24	32	27	24	31	27	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6327	6327	6327
5°	6212	6277	6361
10°	6187	6362	6594
15°	6014	6273	6611
20°	5851	6205	6684
25°	5525	5910	6447
30°	5209	5633	6195
35°	4991	5394	5929
40°	4742	5088	5498
45°	4701	4915	5045
50°	4346	4269	4049
55°	4285	3559	3285
60°	4095	2695	2707
65°	3947	2262	2189
70°	3705	1974	1749
75°	3360	1775	1525
80°	2823	1580	1243
85°	2087	1344	991



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	194.2	4.3	3.3
10°-20°	556.5	12.3	9.4
20°-30°	804.7	17.8	13.6
30°-40°	897.8	19.8	15.2
40°-50°	846.1	18.7	14.3
50°-60°	616.0	13.6	10.4
60°-70°	381.5	8.4	6.5
70°-80°	183.0	4.0	3.1
80°-90°	47.5	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°	1555.4	34.4	26.4
0°-40°	2453.1	54.2	41.6
0°-60°	3915.2	86.5	66.4
0°-90°	4527.2	100.0	76.7
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°	4527.2	100.0	76.7

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2052	2052	2052	2052	2052	
5°	2007	2011	2028	2044	2055	191
15°	1884	1913	1965	2027	2071	531
25°	1624	1672	1737	1818	1895	748
35°	1326	1377	1433	1500	1575	828
45°	1078	1120	1127	1119	1157	819
55°	797	799	662	567	611	708
65°	541	507	310	296	300	534
75°	282	179	149	137	128	299
85°	59	43	38	33	28	75
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2052	2052	2052	2052	2052
5°	2007	2011	2028	2044	2055
10°	1976	1992	2032	2078	2106
15°	1884	1913	1965	2027	2071
20°	1783	1825	1891	1969	2037
25°	1624	1672	1737	1818	1895
30°	1463	1519	1582	1660	1740
35°	1326	1377	1433	1500	1575
40°	1178	1224	1264	1303	1366
45°	1078	1120	1127	1119	1157
50°	906	929	890	823	844
55°	797	799	662	567	611
60°	664	649	437	412	439
65°	541	507	310	296	300
70°	411	328	219	203	194
75°	282	179	149	137	128
80°	159	101	89	79	70
85°	59	43	38	33	28
90°	0	0	0	0	0

(END OF REPORT)