

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. 12050.0

Luminaire Tested: **S194 1/54 T5HO S17F**

Issue Date: 3/3/2020

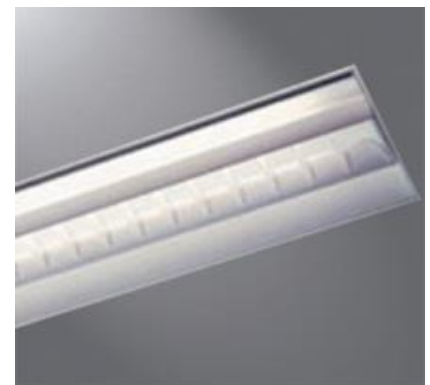
Test Information

Test Method: LM-41-14
Report Number: BALLABS TEST NO. 12050.0
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S194 1/54 T5HO S17F
Description: 1/54W T5HO LAMP 1x4'RECESSED GRID LUMINAIRE w/WHITE REFL
Light Source: -
FP54T5HO/835
Ballast/Driver: UNIVERSAL BALLAST #B254PUNV-D WATTS=55 REFL=91%

Summary

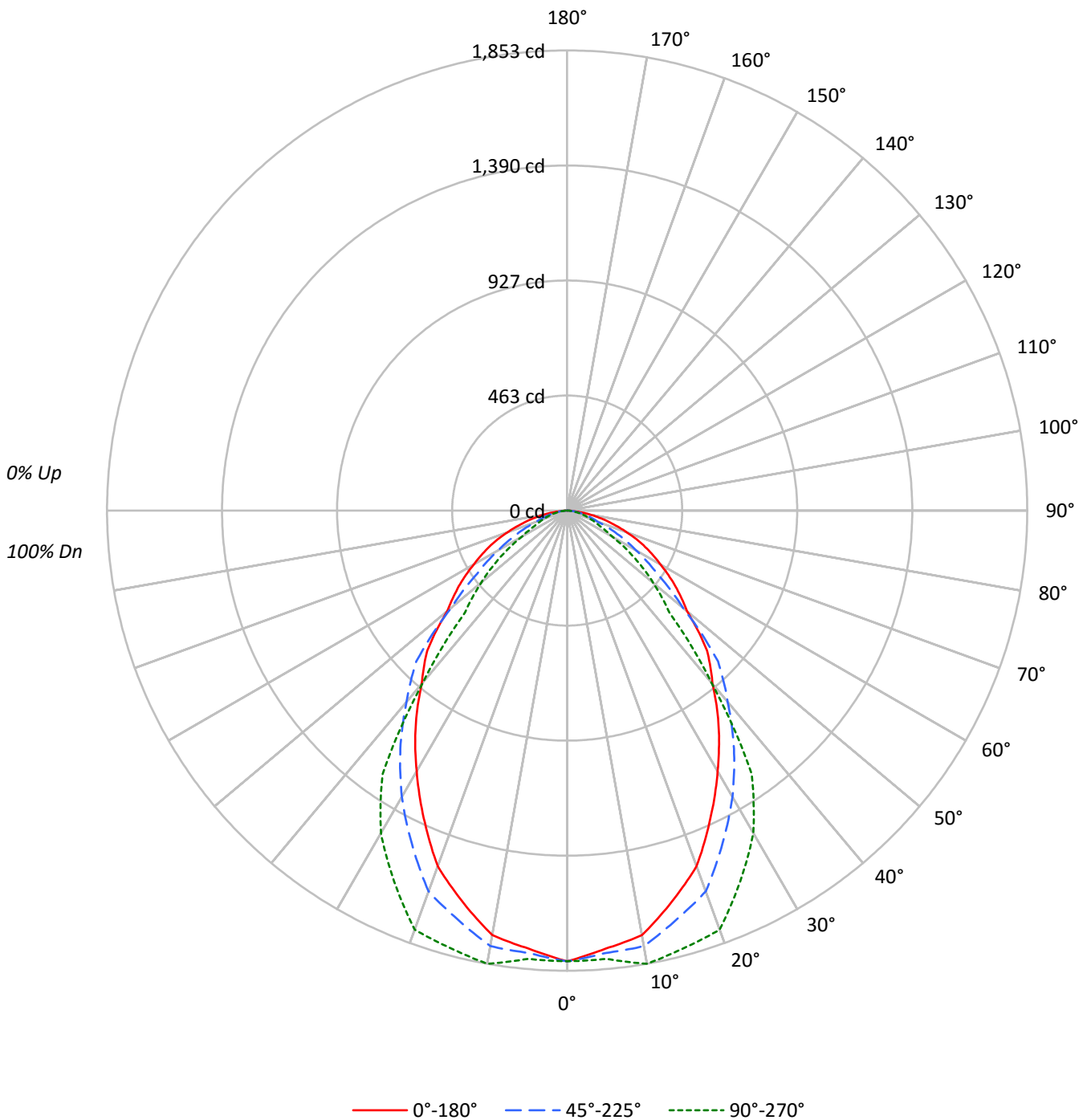
Lumens per Lamp: 5000 (1 lamp)
Luminaire Lumens: 3429.8 lumens
Efficiency: 68.6%
Efficacy: 62.4 lumens/watt
Spacing Criteria (0/90/45): 1.03 / 1.21 / 1.18
Luminous Opening: Rectangular (W 0.89' x L: 3.92' x H: 0')
CIE Type: Direct

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



TEST NUMBER: BALLABS TEST NO. 12050.0
CATALOG NUMBER: S194 1/54 T5HO S17F

Luminous Intensity Polar Plot





TEST NUMBER: BALLABS TEST NO. 12050.0
 CATALOG NUMBER: S194 1/54 T5HO S17F

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	82	82	82	82	80	80	80	80	76	76	76		73	73	73		70	70	70	69
1	76	73	71	69	74	72	70	68	69	67	65		66	65	63		64	63	62	60
2	70	65	62	58	69	64	61	58	62	59	56		60	57	55		58	56	54	52
3	65	59	54	50	63	58	53	50	56	52	49		54	51	48		52	50	47	46
4	60	53	48	44	59	52	47	43	50	46	43		49	45	42		48	44	42	40
5	56	48	43	39	55	47	42	38	46	41	38		45	41	38		43	40	37	36
6	52	44	38	34	51	43	38	34	42	37	34		41	37	34		40	36	33	32
7	49	40	35	31	47	40	35	31	39	34	31		38	34	30		37	33	30	29
8	45	37	32	28	44	37	31	28	36	31	28		35	31	28		34	30	28	26
9	43	34	29	26	42	34	29	26	33	29	25		32	28	25		32	28	25	24
10	40	32	27	23	39	31	27	23	31	26	23		30	26	23		30	26	23	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5598	5598	5598
5°	5483	5536	5610
10°	5437	5578	5803
15°	5205	5441	5821
20°	5002	5356	5895
25°	4649	5036	5608
30°	4316	4740	5342
35°	4006	4409	4880
40°	3668	4050	3632
45°	3476	3747	2543
50°	3023	2922	2169
55°	2866	2377	1780
60°	2677	1980	1295
65°	2532	1620	1036
70°	2308	1190	920
75°	2026	1013	822
80°	1687	853	675
85°	1132	637	531



TEST NUMBER: BALLABS TEST NO. 12050.0
 CATALOG NUMBER: S194 1/54 T5HO S17F

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	171.0	5.0	3.4
10°-20°	484.1	14.1	9.7
20°-30°	686.0	20.0	13.7
30°-40°	725.3	21.1	14.5
40°-50°	587.5	17.1	11.7
50°-60°	398.7	11.6	8.0
60°-70°	240.2	7.0	4.8
70°-80°	111.5	3.3	2.2
80°-90°	25.3	0.7	0.5
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°	1341.1	39.1	26.8
0°-40°	2066.5	60.3	41.3
0°-60°	3052.7	89.0	61.1
0°-90°	3429.8	100.0	68.6
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°	3429.8	100.0	68.6

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1815	1815	1815	1815	1815	
5°	1771	1773	1788	1802	1812	168
15°	1630	1650	1704	1772	1823	460
25°	1366	1400	1480	1567	1648	629
35°	1064	1109	1171	1241	1296	665
45°	797	844	859	656	583	605
55°	533	535	442	360	331	476
65°	347	334	222	159	142	343
75°	170	132	85	75	69	182
85°	32	22	18	15	15	43
90°	0	0	0	0	0	



TEST NUMBER: BALLABS TEST NO. 12050.0
CATALOG NUMBER: S194 1/54 T5HO S17F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1815	1815	1815	1815	1815
5°	1771	1773	1788	1802	1812
10°	1736	1746	1781	1825	1853
15°	1630	1650	1704	1772	1823
20°	1524	1556	1632	1721	1796
25°	1366	1400	1480	1567	1648
30°	1212	1254	1331	1410	1500
35°	1064	1109	1171	1241	1296
40°	911	956	1006	948	902
45°	797	844	859	656	583
50°	630	660	609	479	452
55°	533	535	442	360	331
60°	434	428	321	243	210
65°	347	334	222	159	142
70°	256	230	132	112	102
75°	170	132	85	75	69
80°	95	59	48	42	38
85°	32	22	18	15	15
90°	0	0	0	0	0

(END OF REPORT)