

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. 14685.0

Luminaire Tested: **1BR/1T5HO/4/UEB/S42**

Issue Date: 3/3/2020

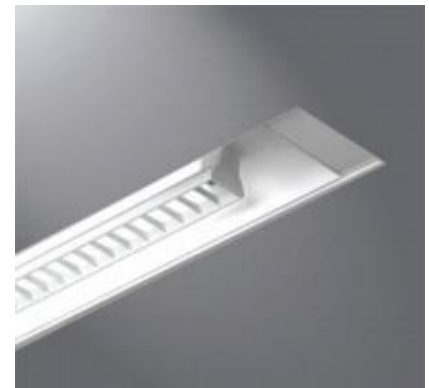
**Test Information**

Test Method: LM-41-14  
Report Number: BALLABS TEST NO. 14685.0  
Test Lab: BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: 1BR/1T5HO/4/UEB/S42  
Description: 1/39W T5HO 48x5.5x4" RECESSED LUMINAIRE w/42" OPEN WHITE REFL  
34.5" ACRYLIC RAIL BAFFLE w/INTERNAL SEMISPEC SIDES & 1" OC  
2" WHITE BLADES UNIVERSAL LTG TECH #B239PUNV-D WATTS=40  
Light Source: -  
FP39T5HO/835  
Ballast/Driver: -

**Summary**

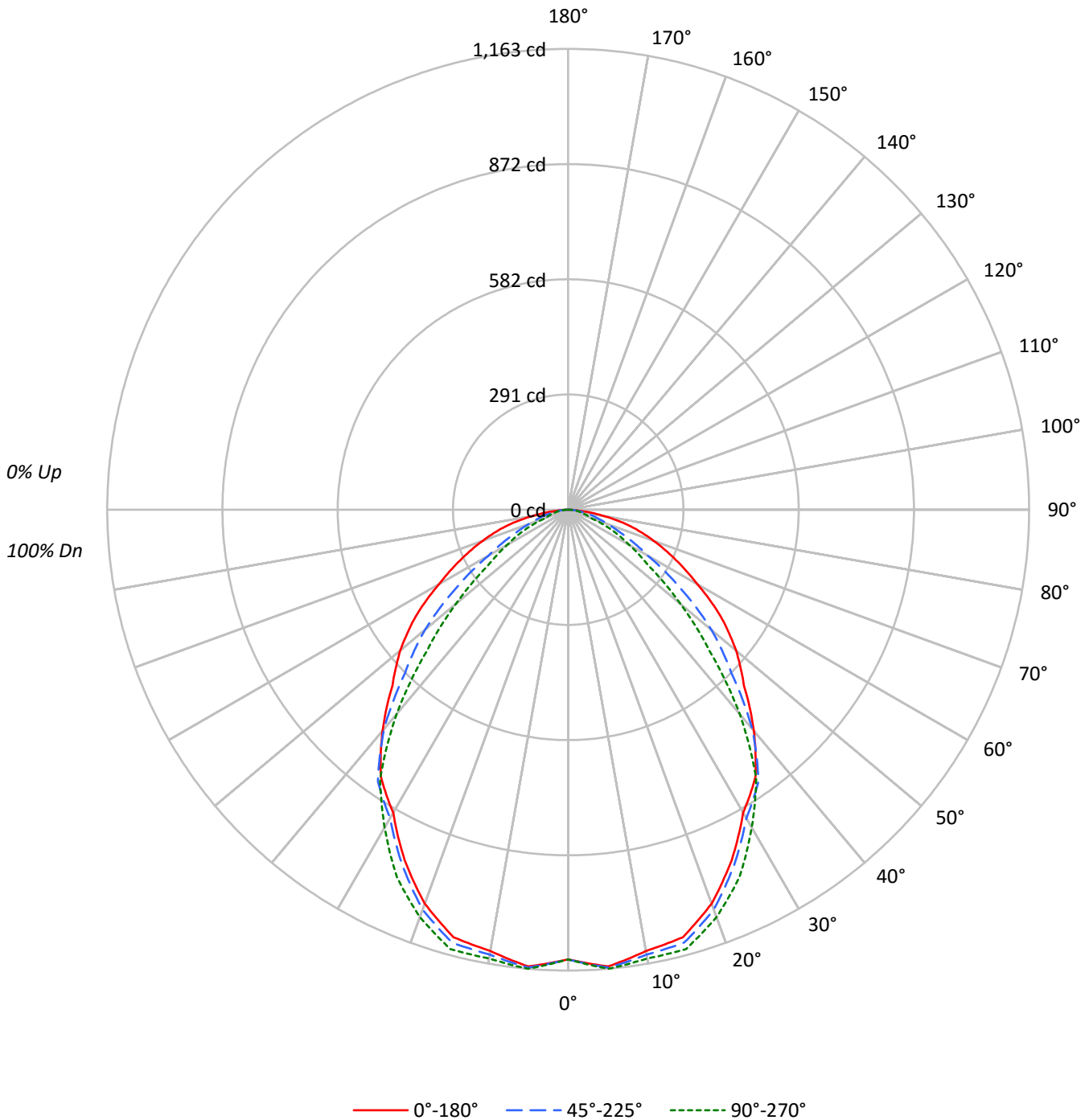
Lumens per Lamp: 3500 (1 lamp)  
Luminaire Lumens: 2455.9 lumens  
Efficiency: 70.2%  
Efficacy: 61.4 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.21 / 1.25  
Luminous Opening: Rectangular (W 0.42' x L: 3.5' x H: 0')  
CIE Type: Direct

Input Watts (W): 40  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	50	30	10	0	
RCR																						
0	84	84	84	84	82	82	82	82	78	78	78	75	75	75	72	72	72	70				70
1	77	75	72	70	76	73	71	69	70	68	66	67	66	64	65	64	63	61				61
2	71	66	62	59	70	65	61	58	63	60	57	60	58	55	58	56	54	53				53
3	66	59	54	50	64	58	54	50	56	52	49	54	51	48	53	50	47	46				46
4	61	53	48	44	59	52	47	43	51	46	43	49	45	42	48	44	42	40				40
5	56	48	42	38	55	47	42	38	46	41	38	45	41	37	43	40	37	36				36
6	52	44	38	34	51	43	38	34	42	37	33	41	36	33	40	36	33	32				32
7	49	40	34	30	48	39	34	30	38	34	30	37	33	30	37	33	30	28				28
8	46	37	31	27	45	36	31	27	35	31	27	35	30	27	34	30	27	26				26
9	43	34	29	25	42	34	28	25	33	28	25	32	28	25	31	27	24	23				23
10	40	31	26	23	39	31	26	23	30	26	23	30	26	22	29	25	22	21				21

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	8272	8272	8272
5°	8464	8486	8508
10°	8370	8436	8510
15°	8428	8533	8661
20°	8205	8329	8484
25°	7848	7961	8226
30°	7431	7565	7792
35°	7331	7446	7358
40°	6935	6878	6403
45°	6462	5998	5205
50°	6270	5351	4184
55°	5972	4396	3164
60°	5480	3381	2594
65°	5156	2742	2087
70°	4879	2237	1321
75°	4646	1943	1183
80°	3861	1595	1217
85°	2341	1421	1254



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	109.7	4.5	3.1
10°-20°	316.7	12.9	9.0
20°-30°	457.2	18.6	13.1
30°-40°	511.8	20.8	14.6
40°-50°	447.9	18.2	12.8
50°-60°	320.2	13.0	9.1
60°-70°	185.1	7.5	5.3
70°-80°	85.2	3.5	2.4
80°-90°	22.0	0.9	0.6
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°	883.6	36.0	25.2
0°-40°	1395.5	56.8	39.9
0°-60°	2163.5	88.1	61.8
0°-90°	2455.9	100.0	70.2
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°	2455.9	100.0	70.2

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1135	1135	1135	1135	1135	
5°	1157	1157	1160	1163	1163	109
15°	1117	1121	1131	1143	1148	313
25°	976	981	990	1010	1023	449
35°	824	829	837	827	827	510
45°	627	626	582	520	505	490
55°	470	445	346	269	249	418
65°	299	238	159	135	121	298
75°	165	94	69	51	42	172
85°	28	21	17	15	15	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1135	1135	1135	1135	1135
5°	1157	1157	1160	1163	1163
10°	1131	1133	1140	1147	1150
15°	1117	1121	1131	1143	1148
20°	1058	1064	1074	1087	1094
25°	976	981	990	1010	1023
30°	883	889	899	916	926
35°	824	829	837	827	827
40°	729	732	723	683	673
45°	627	626	582	520	505
50°	553	545	472	390	369
55°	470	445	346	269	249
60°	376	332	232	188	178
65°	299	238	159	135	121
70°	229	151	105	81	62
75°	165	94	69	51	42
80°	92	47	38	29	29
85°	28	21	17	15	15
90°	0	0	0	0	0

(END OF REPORT)