

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: 12281

Luminaire Tested: **79OS-1T5HO-4I-2EB-SI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 12281
Test Lab: LUMINAIRE TESTING LABORATORY, INC.
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: 79OS-1T5HO-4I-2EB-SI
Description: FORMED STEEL AND EXTRUDED ALUMINUM HOUSING, FORMED WHITE
ENAMEL STEEL REFLECTOR, NO ENCLOSURE.
Light Source: ONE 54 WATT HIGH OUTPUT T5 LINEAR FLUORESCENT LAMP RATED AT
4400 LUMENS.
PHILIPS F54T5/835/HO/ALTO
Ballast/Driver: ONE UNIVERSAL LIGHTING TECHNOLOGIES B254PUNV-D

Summary

Lumens per Lamp: 4400 (1 lamp)
Luminaire Lumens: 2352.6 lumens
Efficiency: 53.5%
Efficacy: 39.9 lumens/watt
Spacing Criteria (0/90/45): 1.52 / 1.25 / 1.56
Luminous Opening: Rectangular w/ Sides (W: 3.83' x L: 0.74' x H: 0.67')
CIE Type: Semi-Direct

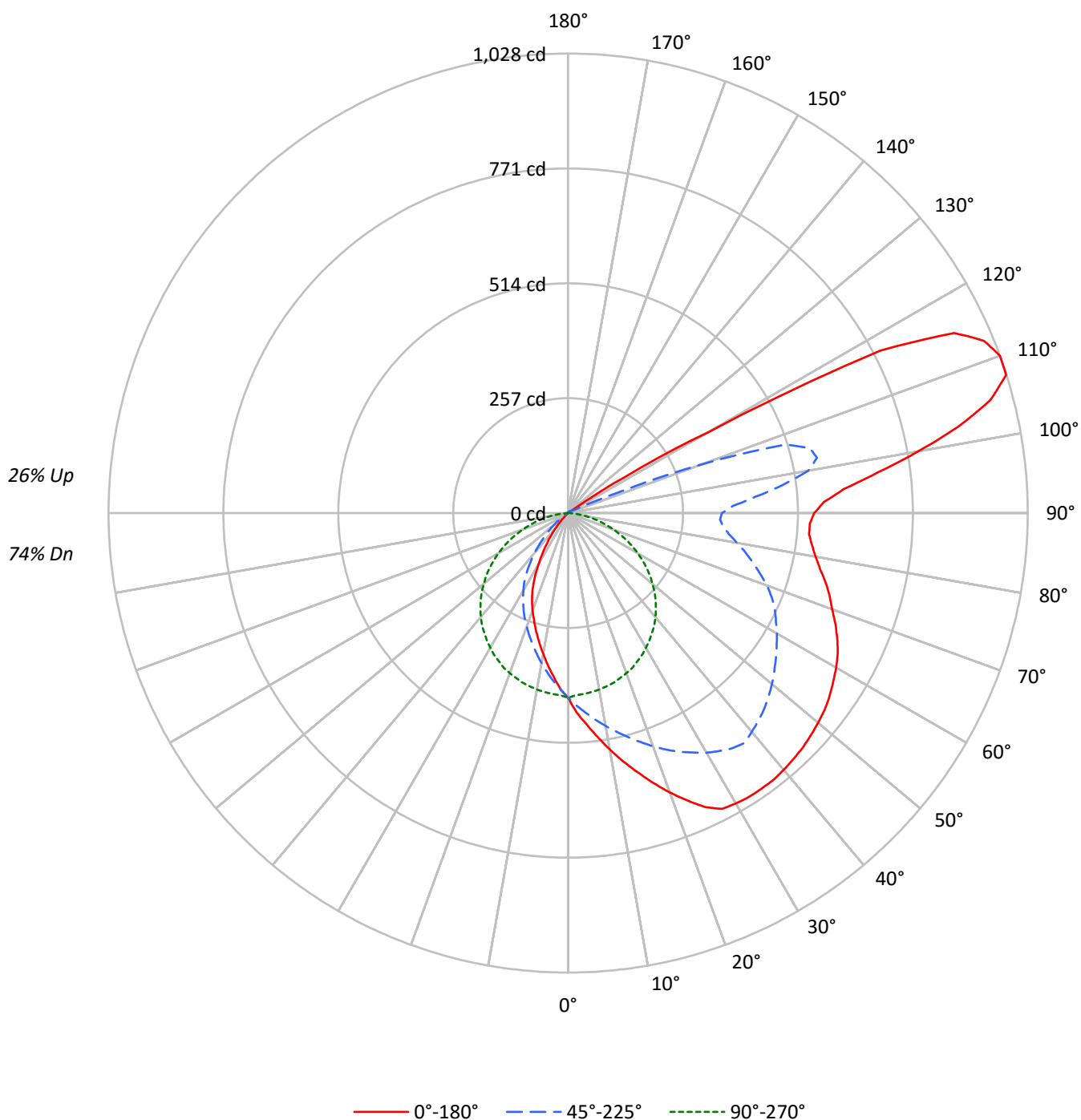
Input Watts (W): 59
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: 12281

CATALOG NUMBER: 79OS-1T5HO-4I-2EB-SI

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				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	60	60	60	60	57	57	57	57	52	52	52	47	47	47	42	42	42
1	53	50	47	45	50	48	45	43	43	41	39	38	37	35	34	33	32
2	48	43	39	35	45	41	37	34	36	33	31	33	30	28	29	27	25
3	43	37	32	29	41	35	31	27	32	28	25	28	25	23	25	23	21
4	39	33	28	24	37	31	26	23	28	24	21	25	22	19	22	20	18
5	36	29	24	20	34	27	23	19	25	21	18	22	19	16	20	17	15
6	33	26	21	17	31	25	20	17	22	18	15	20	17	14	18	15	13
7	31	23	18	15	29	22	18	15	20	16	13	18	15	12	16	14	11
8	28	21	16	13	27	20	16	13	18	15	12	17	13	11	15	12	10
9	26	19	15	12	25	18	14	11	17	13	11	15	12	10	14	11	9
10	25	18	13	11	23	17	13	10	15	12	10	14	11	9	13	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	1569	1569	1569
5°	1678	1524	1300
10°	1786	1500	1064
15°	1899	1476	870
20°	2022	1448	705
25°	2139	1418	554
30°	2160	1386	383
35°	2137	1351	233
40°	2113	1314	116
45°	2092	1266	28
50°	2075	1203	3
55°	2062	1134	0
60°	2047	1049	0
65°	2028	948	0
70°	2000	810	0
75°	1997	657	0
80°	2004	450	0
85°	2077	174	0

TEST NUMBER: 12281

CATALOG NUMBER: 79OS-1T5HO-4I-2EB-SI

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	39.4	1.7	0.9
10°-20°	117.0	5.0	2.7
20°-30°	189.5	8.1	4.3
30°-40°	240.2	10.2	5.5
40°-50°	261.7	11.1	5.9
50°-60°	263.6	11.2	6.0
60°-70°	246.3	10.5	5.6
70°-80°	213.2	9.1	4.8
80°-90°	179.1	7.6	4.1
90°-100°	204.9	8.7	4.7
100°-110°	250.6	10.7	5.7
110°-120°	136.4	5.8	3.1
120°-130°	9.0	0.4	0.2
130°-140°	1.2	0.1	0.0
140°-150°	0.4	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°	345.9	14.7	7.9
0°-40°	586.0	24.9	13.3
0°-60°	1111.3	47.2	25.3
0°-90°	1750.0	74.4	39.8
90°-120°	592.0	25.2	13.5
90°-150°	602.6	25.6	13.7
90°-180°	603.0	25.6	13.7
0°-180°	2352.6	100.0	53.5

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	413	413	413	413	413	
5°	475	448	406	377	368	47
15°	600	519	393	305	275	172
25°	726	589	366	236	188	334
35°	753	642	327	161	82	473
45°	742	620	277	75	10	574
55°	714	567	214	16	0	639
65°	664	510	145	7	0	657
75°	596	427	74	3	0	629
85°	541	348	12	2	0	447
90°	550	344	0	1	0	303
95°	619	421	0	0	0	545
105°	978	560	0	0	0	1007
115°	953	28	0	0	0	858
125°	9	9	0	0	0	80
135°	1	5	0	0	0	1
145°	0	2	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0

TEST NUMBER: 12281

CATALOG NUMBER: 79OS-1T5HO-4I-2EB-SI

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	413	413	413	413	413	413	413	413	413
2.5°	447	438	431	418	408	399	395	391	394
5°	475	463	448	426	406	389	377	367	368
7.5°	505	490	466	434	404	377	359	344	344
10°	537	516	484	441	401	366	341	323	320
12.5°	569	543	501	448	397	353	323	301	297
15°	600	571	519	454	393	341	305	280	275
17.5°	633	600	537	459	387	329	288	260	253
20°	665	629	555	464	381	316	270	240	232
22.5°	696	656	573	468	375	303	254	220	211
25°	726	682	589	471	366	289	236	199	188
27.5°	746	707	604	472	358	274	218	176	161
30°	750	721	619	474	348	260	200	150	133
32.5°	753	721	631	474	338	245	182	123	106
35°	753	720	642	474	327	230	161	99	82
37.5°	753	717	648	473	316	215	138	77	60
40°	750	713	639	471	304	200	116	57	41
42.5°	746	708	630	468	290	184	95	40	24
45°	742	703	620	465	277	168	75	24	10
47.5°	736	696	608	459	262	152	57	11	1
50°	730	688	595	452	246	135	41	4	1
52.5°	723	679	581	444	231	116	28	4	1
55°	714	670	567	433	214	97	16	3	0
57.5°	703	659	553	413	197	78	9	3	0
60°	692	647	539	390	180	61	8	3	0
62.5°	680	634	524	367	162	46	8	3	0
65°	664	618	510	343	145	33	7	3	0
67.5°	647	600	493	318	126	22	7	3	0
70°	628	581	473	294	108	14	5	2	0
72.5°	613	565	450	273	91	10	4	2	0
75°	596	547	427	255	74	8	3	2	0
77.5°	577	527	406	237	57	6	2	1	0
80°	562	511	383	216	41	4	2	1	0
82.5°	550	498	363	191	26	3	2	0	0
85°	541	489	348	169	12	2	2	0	0
87.5°	541	488	340	151	3	0	1	0	0
90°	550	498	344	143	0	0	1	0	0
92.5°	573	525	369	150	0	0	1	0	0
95°	619	579	421	166	0	0	0	0	0
97.5°	699	662	485	168	0	0	0	0	0
100°	795	752	545	129	0	0	0	0	0
102.5°	894	836	570	47	0	0	0	0	0
105°	978	894	560	17	0	0	0	0	0
107.5°	1027	905	509	15	0	0	0	0	0
110°	1028	886	321	12	0	0	0	0	0



TEST NUMBER: 12281

CATALOG NUMBER: 79OS-1T5HO-4I-2EB-SI

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	1007	834	114	11	0	0	0	0	0
115°	953	653	28	9	0	0	0	0	0
117.5°	787	296	14	8	0	0	0	0	0
120°	362	109	11	7	0	0	0	0	0
122.5°	150	12	10	6	0	0	0	0	0
125°	9	8	9	5	0	0	0	0	0
127.5°	3	6	8	4	0	0	0	0	0
130°	2	5	6	4	0	0	0	0	0
132.5°	1	4	5	3	0	0	0	0	0
135°	1	4	5	3	0	0	0	0	0
137.5°	1	4	5	3	0	0	0	0	0
140°	1	3	5	2	0	0	0	0	0
142.5°	0	2	3	1	0	0	0	0	0
145°	0	2	2	1	0	0	0	0	0
147.5°	0	2	2	0	0	0	0	0	0
150°	0	1	1	0	0	0	0	0	0
152.5°	0	1	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0
157.5°	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0
162.5°	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0

(END OF REPORT)