

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: 9786.0

Luminaire Tested: **302IP/2**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 9786.0
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: 302IP/2
Description: 2/32W T8 LAMP 4'PENDANT MNT LUMINAIRE w/PERFORATED HOUSIN
WHITE REFLECTOR IN OPEN TOP REFL=83%
Light Source: -
F32T8/735/RS
Ballast/Driver: ENERGY SAVINGS BALLAST #ES-2-T8-32-120-A-S WATTS=59

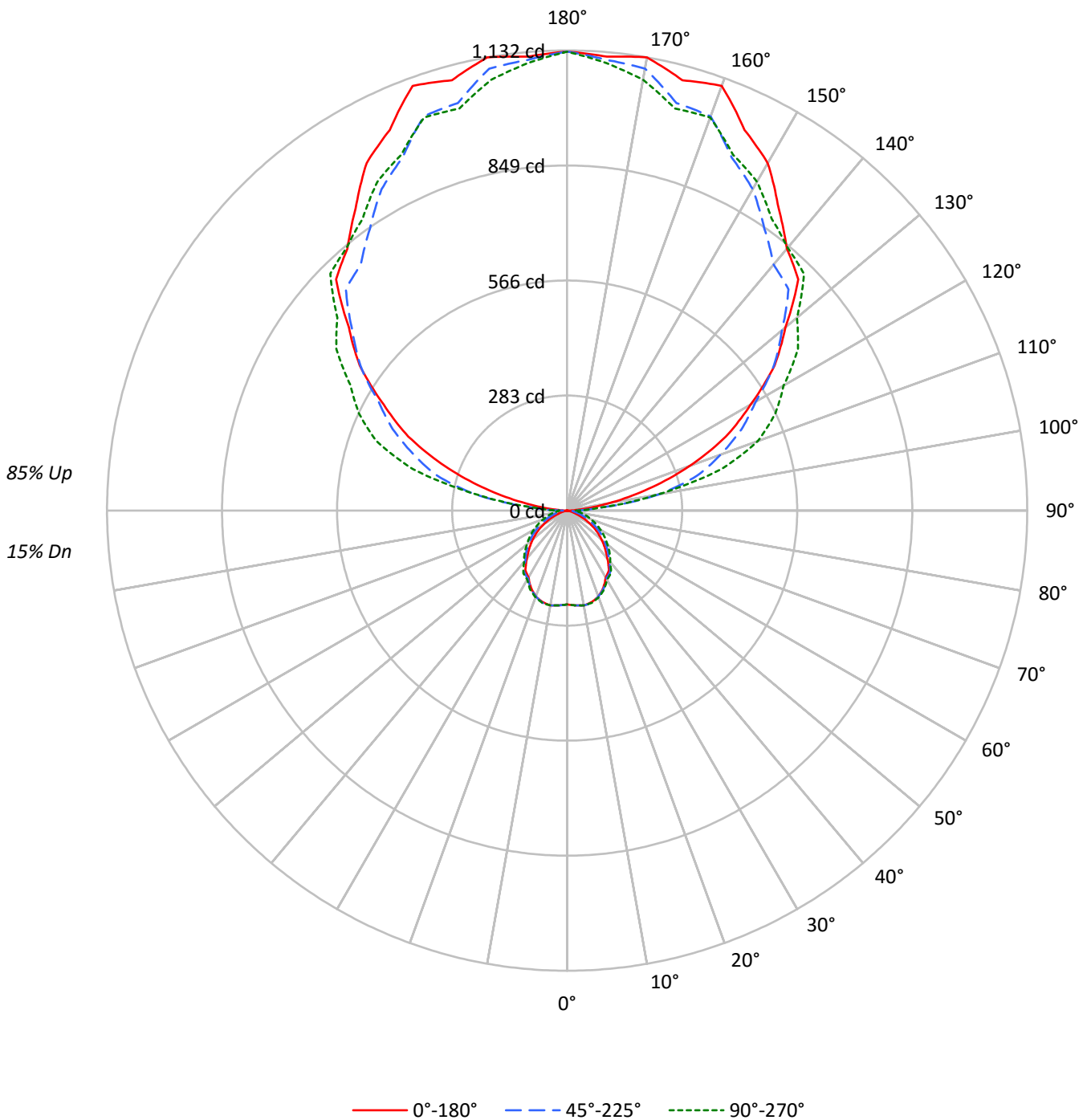
Summary

Lumens per Lamp: 2850 (2 lamps)
Luminaire Lumens: 4040.3 lumens
Efficiency: 70.9%
Efficacy: 68.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.27 / 1.33
Luminous Opening: Rectangular w/ Sides (W: 0.99' x L: 4' x H: 0.25')
CIE Type: Semi-Indirect

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

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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	70	70	70	70	61	61	61	61	45	45	45	31	31	31	17	17	17	11
1	64	61	58	56	56	53	51	49	40	38	37	27	26	25	15	15	14	9
2	58	53	49	46	51	47	43	41	35	32	31	24	22	21	13	13	12	8
3	53	47	42	38	46	41	37	34	31	28	26	21	19	18	12	11	10	6
4	48	41	36	32	42	36	32	29	27	24	22	18	17	15	10	10	9	6
5	44	37	31	27	39	32	28	24	24	21	19	17	15	13	9	8	8	5
6	41	33	27	23	35	29	24	21	22	18	16	15	13	11	9	8	7	4
7	37	29	24	20	33	26	21	18	19	16	14	13	11	10	8	7	6	4
8	35	26	21	18	30	23	19	16	18	15	12	12	10	9	7	6	5	3
9	32	24	19	16	28	21	17	14	16	13	11	11	9	8	7	6	5	3
10	30	22	17	14	26	19	15	12	15	12	10	10	8	7	6	5	4	3

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	628	628	628
5°	635	626	625
10°	647	629	626
15°	645	624	619
20°	636	602	601
25°	612	576	577
30°	576	537	537
35°	569	531	530
40°	519	478	483
45°	478	446	454
50°	433	404	419
55°	387	370	390
60°	319	322	359
65°	238	279	325
70°	156	227	291
75°	102	184	265
80°	35	145	238
85°	0	123	209



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	22.4	0.6	0.4
10°-20°	65.8	1.6	1.2
20°-30°	97.4	2.4	1.7
30°-40°	113.0	2.8	2.0
40°-50°	108.5	2.7	1.9
50°-60°	90.5	2.2	1.6
60°-70°	61.6	1.5	1.1
70°-80°	33.6	0.8	0.6
80°-90°	15.5	0.4	0.3
90°-100°	95.4	2.4	1.7
100°-110°	319.7	7.9	5.6
110°-120°	467.5	11.6	8.2
120°-130°	555.4	13.7	9.7
130°-140°	591.2	14.6	10.4
140°-150°	541.9	13.4	9.5
150°-160°	453.7	11.2	8.0
160°-170°	301.0	7.4	5.3
170°-180°	106.1	2.6	1.9
0°-30°	185.7	4.6	3.3
0°-40°	298.7	7.4	5.2
0°-60°	497.8	12.3	8.7
0°-90°	608.5	15.1	10.7
90°-120°	882.6	21.8	15.5
90°-150°	2571.0	63.6	45.1
90°-180°	3432.0	84.9	60.2
0°-180°	4040.3	100.0	70.9

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	231	231	231	231	231	
5°	234	234	234	234	234	22
15°	233	233	235	235	235	66
25°	210	212	212	215	215	96
35°	179	181	185	187	188	110
45°	132	135	142	146	148	102
55°	89	93	103	110	112	79
65°	42	49	64	74	78	42
75°	12	17	32	45	49	13
85°	0	3	14	23	26	1
90°	0	3	9	17	20	4
95°	28	82	81	78	78	48
105°	207	221	331	390	392	221
115°	431	390	473	541	565	422
125°	623	551	621	673	693	552
135°	804	724	770	816	824	609
145°	907	837	846	868	877	571
155°	1033	980	958	965	966	481
165°	1096	1079	1038	1026	1024	314
175°	1121	1119	1113	1110	1105	107
180°	1129	1129	1129	1129	1129	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	231	231	231	231	231
5°	234	234	234	234	234
10°	237	235	237	237	237
15°	233	233	235	235	235
20°	225	225	225	227	227
25°	210	212	212	215	215
30°	190	192	193	196	196
35°	179	181	185	187	188
40°	154	156	160	165	165
45°	132	135	142	146	148
50°	110	114	121	128	129
55°	89	93	103	110	112
60°	65	70	82	92	95
65°	42	49	64	74	78
70°	23	31	46	59	62
75°	12	17	32	45	49
80°	3	9	21	32	37
85°	0	3	14	23	26
90°	0	3	9	17	20
95°	28	82	81	78	78
100°	103	157	229	226	224
105°	207	221	331	390	392
110°	320	299	401	476	499
115°	431	390	473	541	565
120°	521	460	535	595	615
125°	623	551	621	673	693
130°	701	626	690	723	738
135°	804	724	770	816	824
140°	841	766	790	829	844
145°	907	837	846	868	877
150°	987	919	913	927	934
155°	1033	980	958	965	966
160°	1112	1073	1032	1027	1029
165°	1096	1079	1038	1026	1024
170°	1132	1124	1104	1083	1076
175°	1121	1119	1113	1110	1105
180°	1129	1129	1129	1129	1129

(END OF REPORT)