

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: BAL 9055

Luminaire Tested: **16DIP**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: BAL 9055
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: 16DIP
Description: 4'PENDANT LUMINAIRE w/WHITE REFL IN OPEN TOP
PERF SIDES w/OVERLAY, 16-CELL SATIN PARAB LOUVER-DWN
Light Source: 3-F32T8/735/RS
Ballast/Driver: ENERGY SAVINGS #ES-2-T8-32-120-A & #ES-1-T8-32-120-A

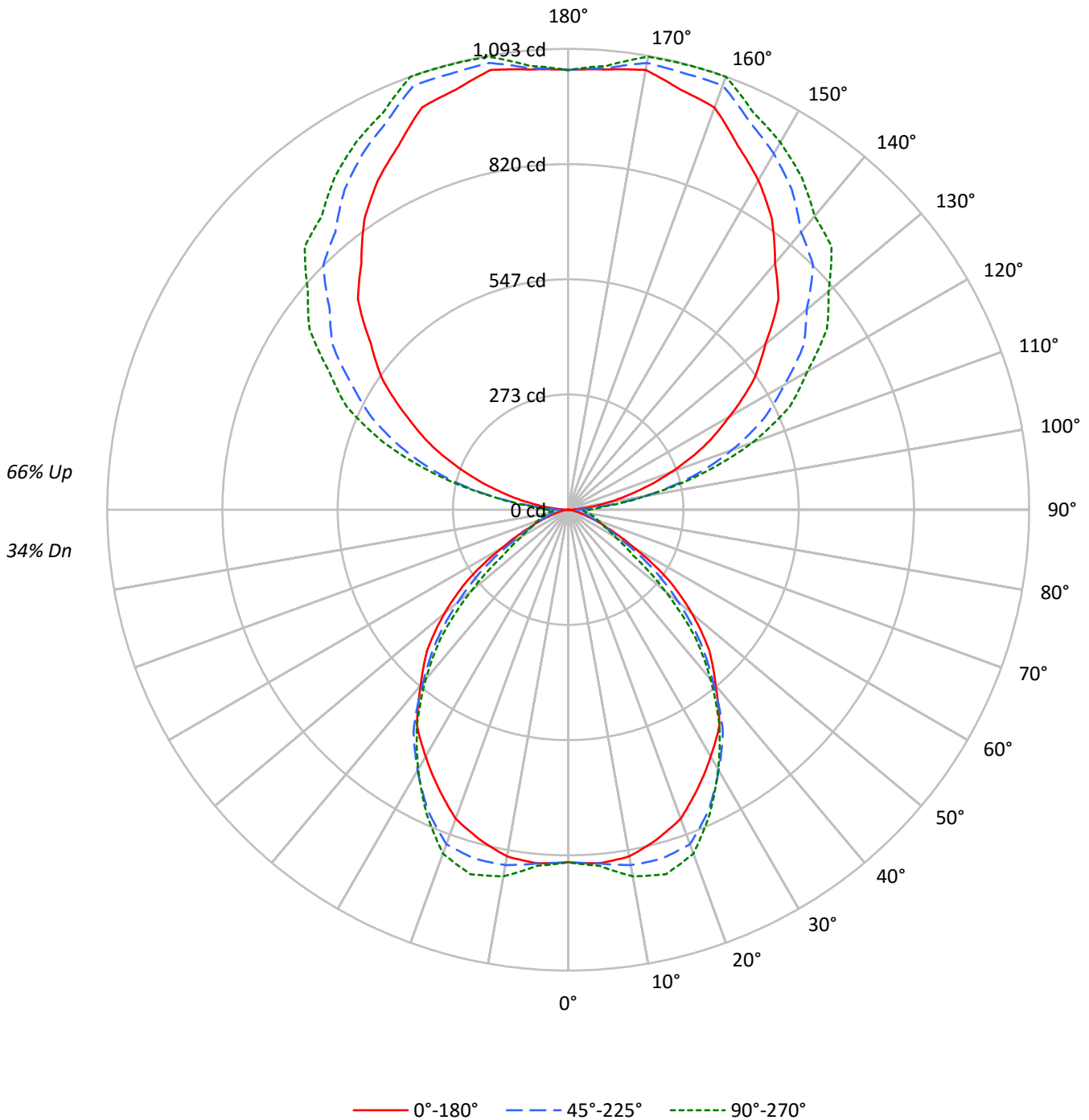
Summary

Lumens per Lamp: 2850 (3 lamps)
Luminaire Lumens: 5331.3 lumens
Efficiency: 62.4%
Efficacy: 53.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.24 / 1.26
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.33')
CIE Type: Semi-Indirect

Input Watts (W): 99
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	64	64	64	64	58	58	58	58	46	46	46	36	36	36	26	26	26	21
1	59	57	54	52	53	51	49	48	41	40	39	32	31	30	23	23	22	19
2	54	50	46	43	49	45	42	40	36	34	33	28	27	26	21	20	19	16
3	50	44	40	37	45	40	36	34	32	30	28	25	24	22	19	18	17	14
4	45	39	35	31	41	36	32	29	29	26	24	23	21	19	17	16	15	12
5	42	35	30	27	38	32	28	25	26	23	21	21	19	17	16	14	13	11
6	39	31	27	23	35	29	25	22	24	21	18	19	17	15	14	13	12	10
7	36	28	24	21	32	26	22	19	21	18	16	17	15	13	13	12	11	9
8	33	26	21	18	30	24	20	17	20	17	14	16	14	12	12	11	10	8
9	31	24	19	16	28	22	18	15	18	15	13	14	12	11	11	10	9	7
10	29	22	17	14	26	20	16	14	16	14	12	13	11	10	10	9	8	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2250	2250	2250
5°	2258	2217	2226
10°	2249	2224	2279
15°	2207	2213	2289
20°	2168	2183	2217
25°	2081	2055	2043
30°	2004	1896	1853
35°	1940	1740	1665
40°	1786	1507	1441
45°	1662	1300	1210
50°	1459	1057	896
55°	1216	816	595
60°	847	542	430
65°	551	355	357
70°	359	270	312
75°	214	218	287
80°	105	168	268
85°	47	127	231



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	80.9	1.5	0.9
10°-20°	240.7	4.5	2.8
20°-30°	355.8	6.7	4.2
30°-40°	394.0	7.4	4.6
40°-50°	343.8	6.4	4.0
50°-60°	218.9	4.1	2.6
60°-70°	100.6	1.9	1.2
70°-80°	48.4	0.9	0.6
80°-90°	25.2	0.5	0.3
90°-100°	87.6	1.6	1.0
100°-110°	297.8	5.6	3.5
110°-120°	485.7	9.1	5.7
120°-130°	589.4	11.1	6.9
130°-140°	618.7	11.6	7.2
140°-150°	573.0	10.7	6.7
150°-160°	467.2	8.8	5.5
160°-170°	302.4	5.7	3.5
170°-180°	101.2	1.9	1.2
0°-30°	677.4	12.7	7.9
0°-40°	1071.4	20.1	12.5
0°-60°	1634.1	30.7	19.1
0°-90°	1808.3	33.9	21.1
90°-120°	871.1	16.3	10.2
90°-150°	2652.2	49.7	31.0
90°-180°	3523.0	66.1	41.2
0°-180°	5331.3	100.0	62.4

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	836	836	836	836	836	
5°	842	839	842	847	848	80
15°	810	822	857	888	895	229
25°	728	755	787	790	795	336
35°	625	662	639	621	625	387
45°	473	491	442	421	424	361
55°	290	285	247	201	187	255
65°	102	96	91	96	96	109
75°	27	32	44	58	62	32
85°	3	7	18	32	36	4
90°	0	7	24	41	50	5
95°	30	62	65	77	83	43
105°	169	251	306	326	326	181
115°	355	441	512	561	580	349
125°	537	607	682	731	749	475
135°	705	763	821	867	883	538
145°	842	893	925	952	964	525
155°	952	986	1016	1035	1039	441
165°	1031	1045	1071	1086	1092	293
175°	1048	1050	1051	1056	1057	100
180°	1043	1043	1043	1043	1043	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	836	836	836	836	836
5°	842	839	842	847	848
10°	835	839	856	876	883
15°	810	822	857	888	895
20°	780	798	844	867	868
25°	728	755	787	790	795
30°	676	711	714	708	711
35°	625	662	639	621	625
40°	544	575	535	511	525
45°	473	491	442	421	424
50°	383	387	341	308	299
55°	290	285	247	201	187
60°	180	172	152	131	126
65°	102	96	91	96	96
70°	56	56	62	73	76
75°	27	32	44	58	62
80°	10	16	29	44	50
85°	3	7	18	32	36
90°	0	7	24	41	50
95°	30	62	65	77	83
100°	91	160	184	187	184
105°	169	251	306	326	326
110°	259	351	413	459	465
115°	355	441	512	561	580
120°	441	517	592	639	654
125°	537	607	682	731	749
130°	610	673	738	789	806
135°	705	763	821	867	883
140°	763	816	859	896	909
145°	842	893	925	952	964
150°	902	946	975	996	1006
155°	952	986	1016	1035	1039
160°	1015	1036	1071	1088	1093
165°	1031	1045	1071	1086	1092
170°	1059	1065	1076	1088	1091
175°	1048	1050	1051	1056	1057
180°	1043	1043	1043	1043	1043

(END OF REPORT)