

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: 9056.0

Luminaire Tested: **16DIP/3 (TOP LAMPS ONLY)**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 9056.0
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: 16DIP/3 (TOP LAMPS ONLY)
Description: 3/32W T8 4'PENDANT LUMINAIRE w/WHITE REFL IN OPEN TOP
PERF SIDES w/OVERLAY, 16-CELL SATIN PARAB LOUVER-DWN

Light Source: F32T8/735/RS
Ballast/Driver: ENERGY SAVINGS #ES-2-T8-32-120-A

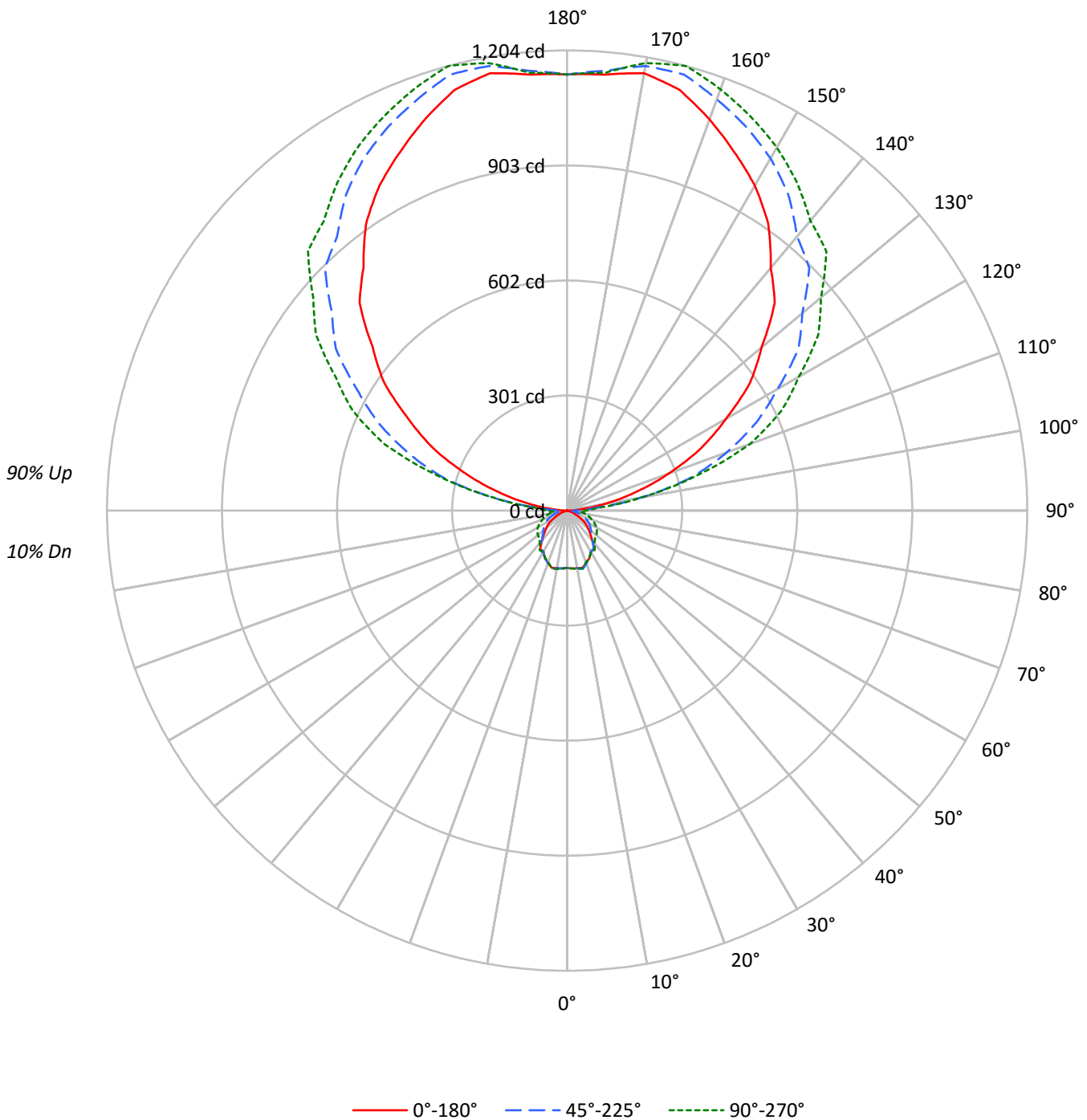
Summary

Lumens per Lamp: 2850 (2 lamps)
Luminaire Lumens: 4259.1 lumens
Efficiency: 74.7%
Efficacy: 65.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.29 / 1.32
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.33')
CIE Type: Semi-Indirect

Input Watts (W): 65
Input Voltage (V): NR
Input Current (A_{in}): 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: 9056.0
CATALOG NUMBER: 16DIP/3 (TOP LAMPS ONLY)

Luminous Intensity Polar Plot





TEST NUMBER: 9056.0

CATALOG NUMBER: 16DIP/3 (TOP LAMPS ONLY)

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	50	30	10	50	30	10	50	30	10	0																
RCR																																														
0	73	73	73	73	64	64	64	64	46	46	46	30	30	30	15	15	15	8																												
1	66	63	60	58	58	55	53	51	40	38	37	26	25	24	13	12	12	6																												
2	60	55	51	47	52	48	45	42	35	33	31	23	21	20	11	11	10	5																												
3	55	48	43	39	48	42	38	35	31	28	26	20	18	17	10	9	9	4																												
4	50	43	37	33	43	37	33	29	27	24	22	18	16	14	9	8	7	4																												
5	46	38	32	28	40	33	28	25	24	21	18	16	14	12	8	7	6	3																												
6	42	34	28	24	36	29	25	21	21	18	16	14	12	11	7	6	6	3																												
7	39	30	25	21	34	26	22	18	19	16	14	13	11	9	6	6	5	3																												
8	36	27	22	18	31	24	19	16	17	14	12	12	10	8	6	5	4	2																												
9	33	25	19	16	29	22	17	14	16	13	11	11	9	7	5	5	4	2																												
10	31	22	17	14	27	20	15	12	15	12	9	10	8	6	5	4	3	2																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	404	404	404
5°	408	400	399
10°	412	397	400
15°	422	408	399
20°	406	380	368
25°	392	358	350
30°	368	329	328
35°	382	330	336
40°	335	290	305
45°	299	265	294
50°	270	251	300
55°	243	244	302
60°	188	235	304
65°	135	219	293
70°	90	196	279
75°	32	173	274
80°	0	139	252
85°	0	99	225



TEST NUMBER: 9056.0

CATALOG NUMBER: 16DIP/3 (TOP LAMPS ONLY)

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	14.5	0.3	0.3
10°-20°	43.4	1.0	0.8
20°-30°	63.0	1.5	1.1
30°-40°	74.6	1.8	1.3
40°-50°	71.9	1.7	1.3
50°-60°	66.5	1.6	1.2
60°-70°	53.3	1.3	0.9
70°-80°	35.3	0.8	0.6
80°-90°	21.0	0.5	0.4
90°-100°	89.8	2.1	1.6
100°-110°	321.4	7.5	5.6
110°-120°	522.6	12.3	9.2
120°-130°	637.1	15.0	11.2
130°-140°	673.1	15.8	11.8
140°-150°	623.9	14.6	10.9
150°-160°	506.6	11.9	8.9
160°-170°	330.4	7.8	5.8
170°-180°	110.6	2.6	1.9
0°-30°	120.9	2.8	2.1
0°-40°	195.6	4.6	3.4
0°-60°	334.0	7.8	5.9
0°-90°	443.7	10.4	7.8
90°-120°	933.7	21.9	16.4
90°-150°	2867.8	67.3	50.3
90°-180°	3815.0	89.6	66.9
0°-180°	4259.1	100.0	74.7

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	150	150	150	150	150	
5°	152	152	152	152	152	15
15°	155	156	158	158	156	43
25°	137	139	137	137	136	63
35°	123	123	121	124	126	74
45°	85	85	90	100	103	66
55°	58	59	74	89	95	51
65°	25	34	56	72	79	26
75°	4	14	35	53	59	6
85°	0	3	14	29	35	0
90°	0	3	19	40	48	4
95°	30	66	68	72	79	46
105°	184	267	337	353	348	197
115°	387	479	546	599	619	380
125°	585	664	739	784	802	518
135°	768	836	896	940	959	585
145°	917	969	1009	1037	1048	571
155°	1035	1069	1108	1124	1137	478
165°	1139	1155	1181	1201	1204	320
175°	1145	1144	1155	1152	1150	110
180°	1141	1141	1141	1141	1141	



TEST NUMBER: 9056.0

CATALOG NUMBER: 16DIP/3 (TOP LAMPS ONLY)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	150	150	150	150	150
5°	152	152	152	152	152
10°	153	153	153	155	155
15°	155	156	158	158	156
20°	146	147	147	146	144
25°	137	139	137	137	136
30°	124	128	124	124	126
35°	123	123	121	124	126
40°	102	102	103	108	111
45°	85	85	90	100	103
50°	71	72	81	94	100
55°	58	59	74	89	95
60°	40	47	66	82	89
65°	25	34	56	72	79
70°	14	24	45	63	68
75°	4	14	35	53	59
80°	0	8	24	40	47
85°	0	3	14	29	35
90°	0	3	19	40	48
95°	30	66	68	72	79
100°	98	171	197	197	196
105°	184	267	337	353	348
110°	282	376	444	499	508
115°	387	479	546	599	619
120°	479	564	635	682	700
125°	585	664	739	784	802
130°	664	734	803	849	867
135°	768	836	896	940	959
140°	829	889	936	974	990
145°	917	969	1009	1037	1048
150°	982	1027	1064	1087	1097
155°	1035	1069	1108	1124	1137
160°	1089	1111	1145	1163	1173
165°	1139	1155	1181	1201	1204
170°	1162	1165	1181	1188	1189
175°	1145	1144	1155	1152	1150
180°	1141	1141	1141	1141	1141

(END OF REPORT)