

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: 17895

Luminaire Tested: **MB-SC-1T5**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 17895
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: MB-SC-1T5
Description: DIRECT/INDIRECT SUSPENDED LUMINAIRE - MINIGATOR WHITE INTERIOR WITH
SPECULAR REFLECTORS AND WHITE LENS OVER CONCAVE PERF PANEL
Light Source: ONE PHILIPS 54 WATT T5 LAMP

F54T5.841HO. LUMEN RATING = 4500 LMS.

Ballast/Driver: -

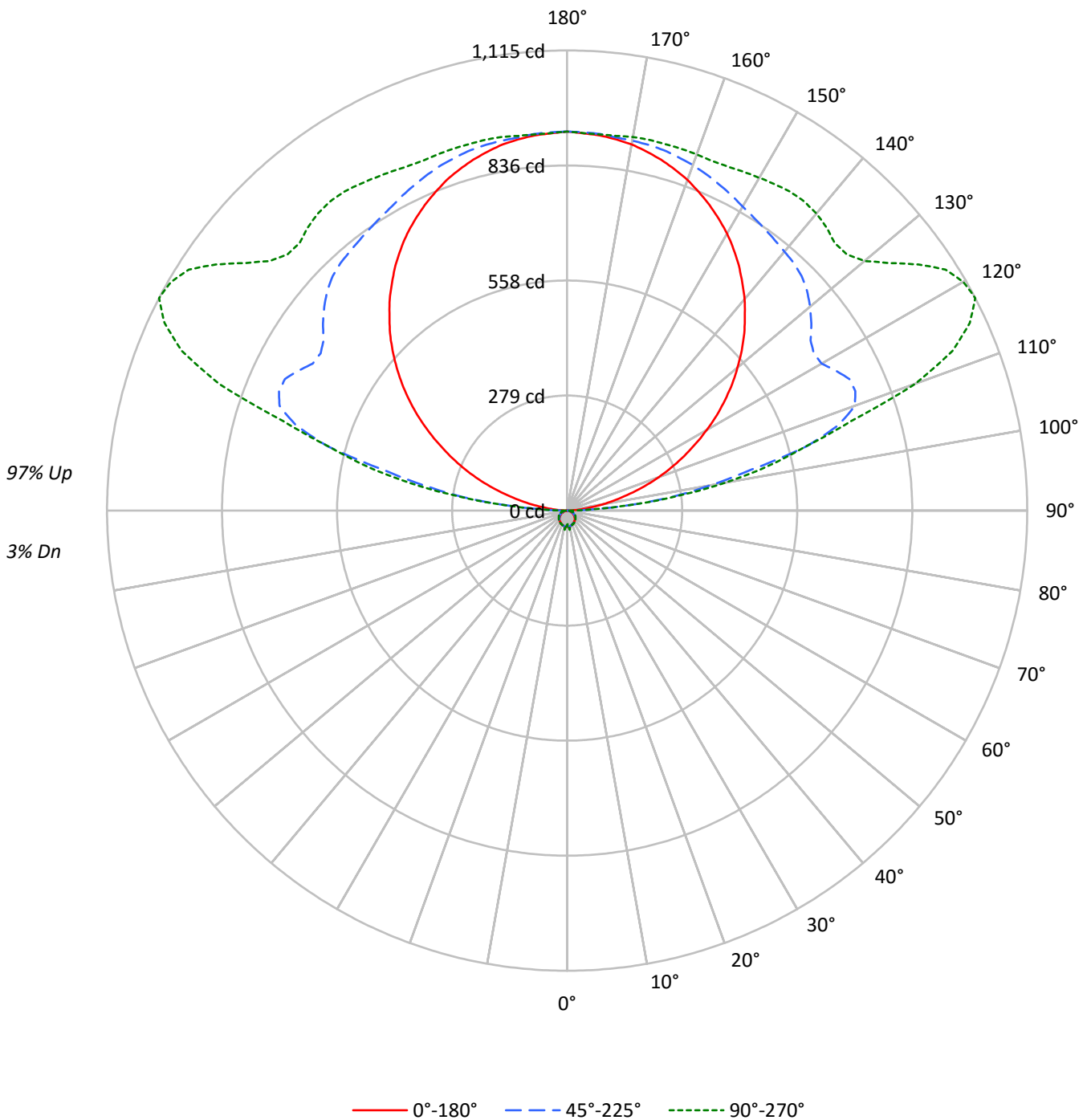
Summary

Lumens per Lamp: 4500 (1 lamp)
Luminaire Lumens: 4031.0 lumens
Efficiency: 89.6%
Efficacy: 67.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.41
Luminous Opening: Rectangular (W 0.22' x L: 3.59' x H: 0')
CIE Type: Indirect

Input Watts (W): 60
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

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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	86	86	86	86	74	74	74	74	51	51	51	31	31	31	12	12	12	3
1	78	75	71	68	67	64	62	59	45	43	42	27	26	25	10	10	10	2
2	71	65	60	56	61	56	52	48	39	36	34	23	22	21	9	8	8	2
3	65	57	51	46	55	49	44	40	34	31	29	21	19	18	8	7	7	2
4	59	50	44	39	50	43	38	34	30	27	24	18	16	15	7	6	6	1
5	54	44	38	33	46	38	33	29	27	23	21	16	14	13	6	5	5	1
6	49	40	33	28	42	34	29	25	24	20	18	14	12	11	6	5	4	1
7	46	35	29	24	39	31	25	21	22	18	15	13	11	9	5	4	4	1
8	42	32	25	21	36	28	22	18	19	16	13	12	10	8	5	4	3	1
9	39	29	23	18	33	25	20	16	18	14	12	11	9	7	4	3	3	1
10	36	26	20	16	31	23	18	14	16	13	10	10	8	6	4	3	3	1

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	529	529	529
5°	539	532	490
10°	538	531	560
15°	531	535	523
20°	538	512	526
25°	531	514	531
30°	515	530	543
35°	524	522	544
40°	507	536	544
45°	505	524	555
50°	502	511	558
55°	480	554	585
60°	480	537	611
65°	484	568	651
70°	387	578	665
75°	400	648	695
80°	228	659	801
85°	219	500	1110



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	3.7	0.1	0.1
10°-20°	10.6	0.3	0.2
20°-30°	16.0	0.4	0.4
30°-40°	19.7	0.5	0.4
40°-50°	21.0	0.5	0.5
50°-60°	20.0	0.5	0.4
60°-70°	16.9	0.4	0.4
70°-80°	11.7	0.3	0.3
80°-90°	4.6	0.1	0.1
90°-100°	151.8	3.8	3.4
100°-110°	506.7	12.6	11.3
110°-120°	706.9	17.5	15.7
120°-130°	667.1	16.5	14.8
130°-140°	603.9	15.0	13.4
140°-150°	524.3	13.0	11.7
150°-160°	403.2	10.0	9.0
160°-170°	255.4	6.3	5.7
170°-180°	87.3	2.2	1.9
0°-30°	30.3	0.8	0.7
0°-40°	50.0	1.2	1.1
0°-60°	91.1	2.3	2.0
0°-90°	124.3	3.1	2.8
90°-120°	1365.4	33.9	30.3
90°-150°	3160.8	78.4	70.2
90°-180°	3907.0	96.9	86.8
0°-180°	4031.0	100.0	89.6

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	39	39	39	39	39	
5°	39	38	39	38	36	4
15°	38	37	38	38	37	11
25°	35	34	34	34	35	16
35°	32	31	31	32	33	19
45°	26	26	27	28	29	20
55°	20	21	23	24	25	18
65°	15	14	18	19	20	14
75°	8	10	12	12	13	8
85°	1	4	3	5	7	2
90°	0	0	0	0	0	1
95°	29	118	149	151	151	36
105°	158	362	600	616	596	168
115°	313	460	754	995	1077	309
125°	467	561	720	932	1039	417
135°	607	664	804	890	917	468
145°	725	769	834	916	943	453
155°	817	841	872	908	920	376
165°	880	890	904	918	919	248
175°	912	918	916	916	915	87
180°	918	918	918	918	918	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	38.8	38.8	38.8	38.8	38.8
2.5°	39.4	37.9	38.4	38.4	32.3
5°	39.4	38.4	38.9	37.5	35.8
7.5°	39.4	38.4	38.9	37.9	47.1
10°	38.9	38.4	38.4	37.9	40.5
12.5°	38.4	38.4	37.9	37.5	37.5
15°	37.6	37.1	37.9	37.9	37.1
17.5°	36.8	36.3	36.6	37.1	37.5
20°	37.1	36.8	35.3	36.3	36.3
22.5°	35.0	34.9	35.8	35.3	35.3
25°	35.3	34.5	34.2	34.5	35.3
27.5°	33.7	33.7	34.5	34.2	34.2
30°	32.7	32.7	33.7	33.7	34.5
32.5°	31.5	32.3	31.9	32.7	32.7
35°	31.5	30.6	31.4	31.9	32.7
37.5°	30.1	29.6	30.1	31.0	31.4
40°	28.5	28.9	30.1	30.2	30.6
42.5°	28.0	26.7	28.5	28.8	29.8
45°	26.2	25.9	27.2	28.0	28.8
47.5°	24.9	25.4	27.0	27.2	27.2
50°	23.7	23.6	24.1	25.7	26.3
52.5°	21.9	21.8	23.6	24.6	25.7
55°	20.2	21.1	23.3	23.6	24.6
57.5°	18.9	19.2	21.5	23.3	23.6
60°	17.6	18.5	19.7	21.0	22.4
62.5°	15.3	16.7	18.9	20.6	20.5
65°	15.0	14.5	17.6	18.9	20.2
67.5°	12.3	13.7	16.3	17.2	17.9
70°	9.7	12.3	14.5	15.3	16.7
72.5°	9.3	11.0	14.0	14.6	15.0
75°	7.6	10.2	12.3	12.0	13.2
77.5°	6.3	8.4	10.7	10.6	11.0
80°	2.9	6.7	8.4	8.9	10.2
82.5°	2.9	5.0	6.2	7.1	7.1
85°	1.4	3.6	3.2	5.4	7.1
87.5°	0.5	1.0	2.8	5.4	4.5
90°	0.5	0.5	0.5	0.5	0.5
92.5°	8.4	44.0	48.8	60.1	48.4
95°	29.3	118.3	149.1	151.2	151.3
97.5°	55.7	211.1	258.1	267.2	269.4
100°	87.0	293.2	352.7	400.8	390.0
102.5°	120.9	317.9	456.3	456.8	499.3
105°	157.9	361.7	600.1	615.6	596.5
107.5°	196.8	375.2	689.9	738.9	722.0
110°	235.5	396.9	741.9	856.6	897.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	273.6	425.2	755.8	948.2	1010.2
115°	312.7	459.9	754.5	995.0	1076.6
117.5°	351.4	492.8	734.1	1002.0	1114.8
120°	390.5	522.3	712.0	990.3	1108.3
122.5°	429.9	551.4	708.5	949.0	1086.6
125°	466.8	561.0	719.9	932.1	1039.3
127.5°	504.1	588.7	745.9	896.1	985.0
130°	538.8	612.7	768.4	885.6	940.3
132.5°	573.5	638.2	788.5	882.2	919.0
135°	607.1	664.3	803.5	890.4	916.6
137.5°	637.4	689.4	813.2	902.2	930.3
140°	669.1	714.5	819.3	910.0	939.5
142.5°	696.9	739.9	826.1	916.1	943.8
145°	725.1	768.9	833.6	916.4	942.9
147.5°	750.7	778.9	841.8	914.3	937.3
150°	775.0	805.3	850.6	909.1	931.2
152.5°	796.3	824.0	861.7	907.8	925.6
155°	816.7	841.4	871.8	908.3	919.9
157.5°	834.9	855.6	881.7	909.6	916.9
160°	852.7	869.2	890.8	911.7	918.2
162.5°	867.0	880.8	897.7	915.6	919.2
165°	880.1	890.0	904.2	917.9	919.0
167.5°	890.8	901.6	907.8	919.5	920.0
170°	900.8	904.2	910.0	919.0	919.0
172.5°	907.4	913.4	911.7	917.9	915.6
175°	912.5	918.2	916.0	916.4	914.7
177.5°	914.8	921.6	917.4	917.3	915.6
180°	918.4	918.4	918.4	918.4	918.4

(END OF REPORT)