

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: 18001

Luminaire Tested: **MB-SC-2T8**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 18001
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: MB-SC-2T8
Description: DIRECT/INDIRECT SUSPENDED LUMINAIRE - MINIGATOR WHITE INTERIOR WITH
SPECULAR REFLECTORS AND WHITE LENS OVER CONCAVE PERF PANEL
Light Source: TWO PHILIPS 32 WATT T8 LAMPS

F32T8/TL841. LUMEN RATING = 3000 LMS.

Ballast/Driver: -

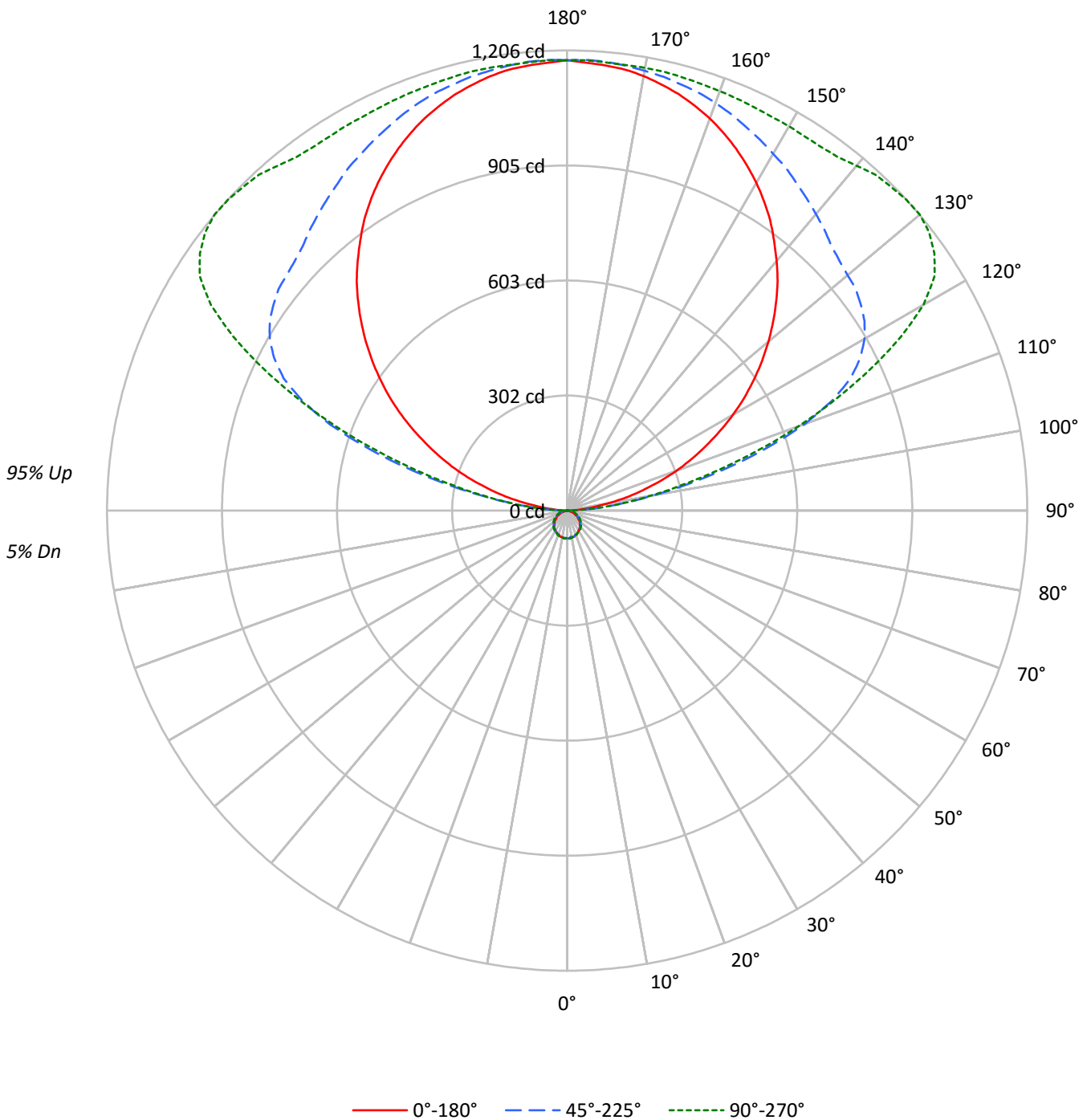
Summary

Lumens per Lamp: 3000 (2 lamps)
Luminaire Lumens: 4624.2 lumens
Efficiency: 77.1%
Efficacy: 81.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.28 / 1.39
Luminous Opening: Rectangular (W 0.22' x L: 3.59' x H: 0')
CIE Type: Indirect

Input Watts (W): 57
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	74	74	74	74	64	64	64	64	45	45	45	27	27	27	11	11	11	4
1	68	64	62	59	58	56	53	51	39	38	36	24	23	22	10	10	9	3
2	61	56	52	48	53	48	45	42	34	32	30	21	20	19	9	8	8	2
3	56	49	44	40	48	43	38	35	30	27	25	18	17	16	8	7	7	2
4	51	43	38	33	44	38	33	29	26	24	21	16	15	13	7	6	6	2
5	47	38	33	28	40	33	28	25	23	20	18	14	13	11	6	5	5	2
6	43	34	28	24	37	30	25	21	21	18	16	13	11	10	5	5	4	1
7	39	31	25	21	34	27	22	18	19	16	13	12	10	8	5	4	4	1
8	36	28	22	18	31	24	19	16	17	14	12	11	9	7	4	4	3	1
9	34	25	20	16	29	22	17	14	15	12	10	10	8	7	4	3	3	1
10	31	23	18	14	27	20	15	12	14	11	9	9	7	6	4	3	3	1

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	999	999	999
5°	1012	996	996
10°	976	998	1001
15°	996	1003	995
20°	982	957	982
25°	976	958	967
30°	958	985	993
35°	957	957	995
40°	952	945	986
45°	937	968	979
50°	907	944	982
55°	820	941	979
60°	831	910	1014
65°	745	874	942
70°	677	897	988
75°	506	916	1006
80°	267	848	965
85°	78	735	985



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	6.9	0.1	0.1
10°-20°	19.8	0.4	0.3
20°-30°	30.0	0.6	0.5
30°-40°	36.4	0.8	0.6
40°-50°	38.3	0.8	0.6
50°-60°	34.6	0.7	0.6
60°-70°	27.1	0.6	0.5
70°-80°	16.7	0.4	0.3
80°-90°	5.2	0.1	0.1
90°-100°	94.7	2.0	1.6
100°-110°	415.5	9.0	6.9
110°-120°	712.8	15.4	11.9
120°-130°	812.4	17.6	13.5
130°-140°	764.2	16.5	12.7
140°-150°	658.0	14.2	11.0
150°-160°	512.6	11.1	8.5
160°-170°	326.8	7.1	5.4
170°-180°	112.2	2.4	1.9
0°-30°	56.7	1.2	0.9
0°-40°	93.1	2.0	1.6
0°-60°	166.0	3.6	2.8
0°-90°	215.0	4.6	3.6
90°-120°	1222.9	26.4	20.4
90°-150°	3457.5	74.8	57.6
90°-180°	4409.0	95.3	73.5
0°-180°	4624.2	100.0	77.1

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	73	73	73	73	73	
5°	74	72	73	72	73	7
15°	71	70	71	71	70	20
25°	65	65	64	66	64	30
35°	58	58	58	60	60	36
45°	49	49	50	51	51	37
55°	34	37	40	40	41	32
65°	23	25	27	30	29	23
75°	10	14	17	19	19	10
85°	0	3	5	6	6	1
90°	0	0	0	0	0	1
95°	33	76	80	80	81	44
105°	204	416	439	419	410	216
115°	402	574	820	877	877	398
125°	597	693	940	1107	1175	534
135°	775	841	980	1143	1200	597
145°	928	978	1048	1135	1162	580
155°	1047	1071	1109	1152	1165	482
165°	1130	1142	1156	1172	1175	319
175°	1171	1179	1180	1182	1179	111
180°	1180	1180	1180	1180	1180	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	73.3	73.3	73.3	73.3	73.3
2.5°	72.8	74.0	73.4	73.4	71.5
5°	74.0	71.5	72.8	72.1	72.8
7.5°	72.8	72.8	68.8	74.4	72.3
10°	70.5	72.1	72.1	71.7	72.3
12.5°	71.1	71.1	71.1	71.1	70.5
15°	70.6	70.0	71.1	71.1	70.5
17.5°	67.7	68.3	68.3	69.4	70.5
20°	67.7	67.1	66.0	68.8	67.7
22.5°	66.6	67.7	66.0	67.7	67.1
25°	64.9	64.9	63.7	65.5	64.3
27.5°	62.2	63.1	63.7	64.3	63.7
30°	60.9	62.2	62.6	62.6	63.1
32.5°	59.2	59.8	58.6	60.3	61.5
35°	57.5	57.5	57.5	59.8	59.8
37.5°	54.2	54.8	55.2	57.5	57.5
40°	53.5	52.9	53.1	55.8	55.4
42.5°	49.1	50.8	52.0	52.9	54.2
45°	48.6	48.6	50.2	51.4	50.8
47.5°	44.6	45.1	48.0	49.1	49.1
50°	42.8	41.9	44.5	45.1	46.3
52.5°	37.9	40.6	42.3	42.3	44.0
55°	34.5	37.2	39.6	40.0	41.2
57.5°	32.8	33.9	35.6	38.3	38.9
60°	30.5	31.1	33.4	35.6	37.2
62.5°	26.5	28.3	30.9	32.2	33.2
65°	23.1	24.9	27.1	30.5	29.2
67.5°	19.7	21.6	25.4	26.6	27.7
70°	17.0	19.1	22.5	24.8	24.8
72.5°	11.4	15.9	21.6	21.4	22.0
75°	9.6	13.6	17.4	18.6	19.1
77.5°	6.2	10.2	14.2	15.3	16.3
80°	3.4	9.0	10.8	11.9	12.3
82.5°	1.7	5.6	7.4	8.5	7.9
85°	0.5	2.8	4.7	5.7	6.3
87.5°	0.5	0.5	4.0	5.1	5.1
90°	0.5	0.5	0.5	0.5	0.5
92.5°	9.1	22.0	26.6	25.4	26.6
95°	33.4	76.0	80.1	80.0	81.2
97.5°	68.1	151.5	145.5	144.9	147.2
100°	108.7	268.2	228.7	252.9	219.1
102.5°	156.5	311.1	327.8	297.4	306.4
105°	203.9	416.2	438.8	419.1	409.5
107.5°	253.6	473.1	552.6	535.1	525.1
110°	304.8	512.0	662.4	648.8	645.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	352.6	545.2	750.1	773.2	760.3
115°	401.6	574.0	819.5	876.8	877.4
117.5°	451.7	601.0	865.8	966.0	986.8
120°	501.2	631.9	900.0	1040.1	1077.9
122.5°	550.7	678.2	924.2	1092.7	1141.6
125°	597.2	693.4	939.6	1107.3	1174.8
127.5°	643.8	737.2	953.5	1135.0	1196.2
130°	688.3	772.1	959.7	1141.7	1206.5
132.5°	732.2	806.6	968.2	1145.1	1205.8
135°	775.1	840.9	980.0	1143.3	1200.1
137.5°	816.6	873.4	998.0	1138.8	1194.6
140°	853.9	907.3	1014.4	1130.4	1180.0
142.5°	891.0	936.0	1031.2	1127.6	1166.9
145°	928.0	978.3	1047.5	1134.8	1162.3
147.5°	960.8	990.6	1066.1	1136.5	1161.3
150°	991.8	1023.8	1079.6	1141.0	1162.9
152.5°	1020.0	1048.6	1095.5	1146.6	1162.9
155°	1047.0	1070.7	1109.4	1152.2	1165.3
157.5°	1071.2	1092.1	1124.2	1158.0	1167.6
160°	1093.8	1110.7	1137.0	1162.9	1169.7
162.5°	1112.4	1127.0	1148.3	1168.6	1172.0
165°	1129.7	1141.6	1155.7	1172.0	1174.8
167.5°	1143.7	1156.8	1164.6	1177.5	1177.7
170°	1156.2	1160.6	1170.3	1178.2	1178.2
172.5°	1165.7	1173.2	1176.0	1179.9	1177.5
175°	1170.9	1178.8	1180.5	1182.2	1178.8
177.5°	1174.8	1180.9	1182.2	1183.9	1181.1
180°	1180.2	1180.2	1180.2	1180.2	1180.2

(END OF REPORT)