

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P474263

Luminaire Tested: **24CZ2-40-RDP-UNV-L840-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474263
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-40-RDP-UNV-L840-CD1-U
Description: 2'X4' TROFFER LED MODULE, SMOOTH LENS W/ RDP INSERT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

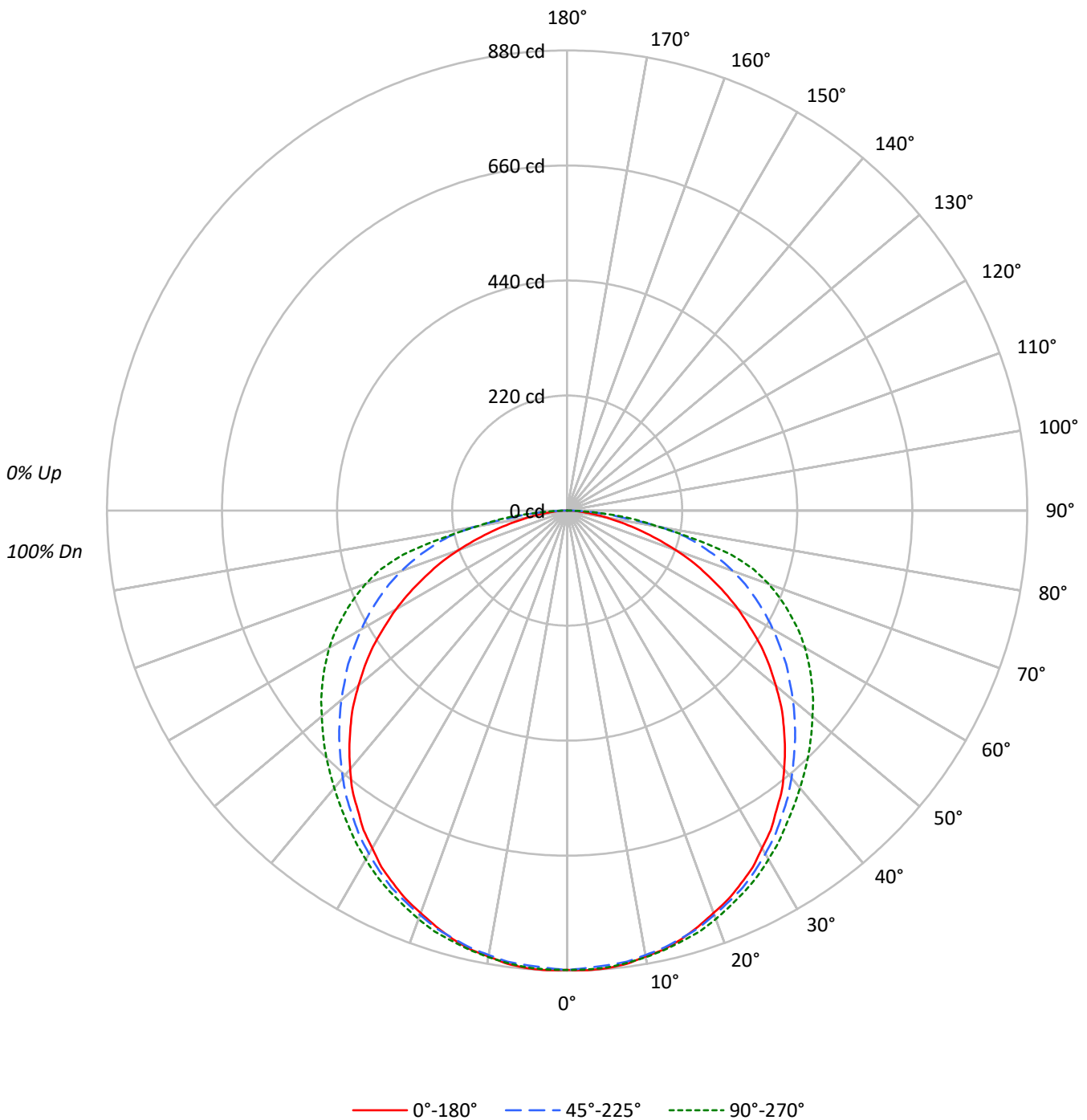
Lumens per Lamp: N/A
Luminaire Lumens: 2793.1 lumens
Efficiency: N/A
Efficacy: 88.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.6
Input Voltage (V): 120
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1182	1182	1182
5°	1186	1179	1185
10°	1183	1179	1185
15°	1181	1179	1187
20°	1172	1178	1190
25°	1168	1181	1193
30°	1158	1177	1197
35°	1147	1174	1202
40°	1134	1173	1216
45°	1115	1173	1244
50°	1090	1180	1282
55°	1063	1199	1339
60°	1018	1223	1413
65°	953	1266	1500
70°	867	1325	1613
75°	734	1397	1685
80°	580	1406	1363
85°	428	1070	1198



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.3	3.0
10°-20°	239.8	8.6
20°-30°	366.7	13.1
30°-40°	448.3	16.0
40°-50°	477.8	17.1
50°-60°	456.8	16.4
60°-70°	387.0	13.9
70°-80°	260.1	9.3
80°-90°	73.4	2.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	689.8	24.7
0°-40°	1138.1	40.7
0°-60°	2072.7	74.2
0°-90°	2793.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2793.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	878	878	878	878	878	
5°	878	877	873	877	877	83
15°	848	848	846	853	852	239
25°	787	790	795	802	804	363
35°	698	704	715	729	732	437
45°	586	596	616	643	654	452
55°	453	470	511	551	571	403
65°	299	330	398	450	471	297
75°	141	192	269	314	324	151
85°	28	57	69	75	78	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	878.4	878.4	878.4	878.4	878.4
2.5°	879.8	879.8	875.6	878.4	878.4
5°	878.4	877.0	872.8	877.0	877.0
7.5°	874.2	872.8	870.1	874.2	872.8
10°	865.9	865.9	863.1	867.3	867.3
12.5°	859.0	857.6	856.2	861.8	860.4
15°	847.9	847.9	846.5	853.4	852.1
17.5°	834.0	835.4	836.8	842.4	843.7
20°	818.8	821.6	822.9	831.3	831.3
22.5°	804.9	806.3	809.1	817.4	817.4
25°	786.9	789.7	795.2	802.2	803.5
27.5°	768.9	770.3	777.2	786.9	788.3
30°	745.3	749.5	757.8	768.9	770.3
32.5°	724.5	728.7	738.4	749.5	752.3
35°	698.2	703.7	714.8	728.7	731.5
37.5°	674.6	678.8	692.6	707.9	712.1
40°	645.7	653.8	667.7	685.7	692.6
42.5°	616.5	624.9	641.5	664.9	673.2
45°	586.1	595.8	616.5	642.9	653.8
47.5°	555.6	566.6	590.2	620.7	633.2
50°	520.9	534.8	563.9	598.5	612.4
52.5°	487.6	504.3	536.2	575.0	593.0
55°	453.0	469.6	511.2	551.4	570.8
57.5°	414.2	436.4	482.1	527.8	548.6
60°	378.3	398.9	454.4	504.3	525.1
62.5°	339.5	367.2	426.7	479.3	500.1
65°	299.3	329.8	397.5	450.2	471.0
67.5°	263.2	296.5	368.6	421.1	441.9
70°	220.3	261.8	336.7	389.2	410.0
72.5°	180.1	225.8	303.4	354.7	374.1
75°	141.2	192.5	268.8	314.5	324.2
77.5°	105.3	159.3	232.7	252.1	245.2
80°	74.9	127.5	181.4	171.7	175.9
82.5°	48.5	97.0	112.3	127.5	131.5
85°	27.7	56.8	69.3	74.9	77.6
87.5°	12.5	20.8	27.7	27.7	26.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)