

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: P474262

Luminaire Tested: **24CZ2-35-RDP-UNV-L840-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474262
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-35-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

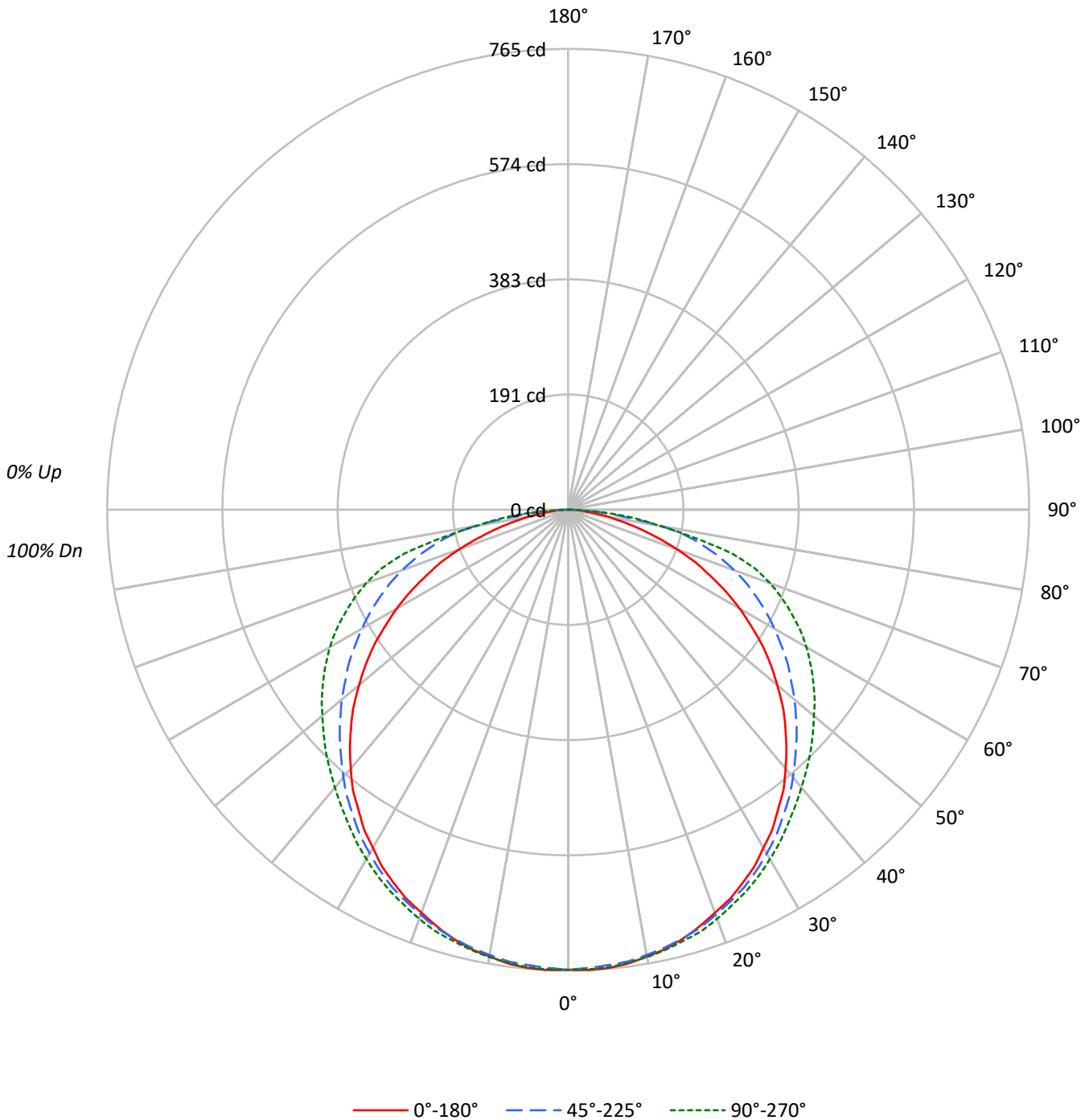
Lumens per Lamp: N/A
Luminaire Lumens: 2428.5 lumens
Efficiency: N/A
Efficacy: 88.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 27.6
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°	1028	1028	1028
5°	1031	1025	1030
10°	1029	1025	1030
15°	1027	1025	1032
20°	1019	1024	1035
25°	1016	1026	1037
30°	1007	1024	1040
35°	997	1021	1045
40°	986	1020	1058
45°	970	1020	1082
50°	948	1026	1115
55°	924	1043	1164
60°	885	1063	1228
65°	828	1101	1304
70°	753	1151	1402
75°	638	1215	1465
80°	504	1223	1185
85°	372	931	1042



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.4	3.0
10°-20°	208.5	8.6
20°-30°	318.8	13.1
30°-40°	389.7	16.0
40°-50°	415.4	17.1
50°-60°	397.2	16.4
60°-70°	336.5	13.9
70°-80°	226.1	9.3
80°-90°	63.8	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°	599.8	24.7
0°-40°	989.5	40.7
0°-60°	1802.1	74.2
0°-90°	2428.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2428.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	764	764	764	764	764	
5°	764	762	759	762	762	73
15°	737	737	736	742	741	208
25°	684	687	691	697	699	315
35°	607	612	622	634	636	380
45°	510	518	536	559	568	393
55°	394	408	444	479	496	351
65°	260	287	346	391	410	258
75°	123	167	234	274	282	132
85°	24	49	60	65	68	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	763.7	763.7	763.7	763.7	763.7
2.5°	764.9	764.9	761.3	763.7	763.7
5°	763.7	762.5	758.9	762.5	762.5
7.5°	760.1	758.9	756.5	760.1	758.9
10°	752.9	752.9	750.5	754.1	754.1
12.5°	746.9	745.7	744.4	749.3	748.1
15°	737.2	737.2	736.0	742.0	740.8
17.5°	725.2	726.4	727.6	732.4	733.6
20°	711.9	714.3	715.5	722.8	722.8
22.5°	699.9	701.1	703.5	710.7	710.7
25°	684.2	686.6	691.4	697.4	698.7
27.5°	668.5	669.7	675.8	684.2	685.4
30°	648.0	651.6	658.9	668.5	669.7
32.5°	630.0	633.6	642.0	651.6	654.1
35°	607.1	611.9	621.5	633.6	636.0
37.5°	586.6	590.2	602.2	615.5	619.1
40°	561.4	568.5	580.5	596.2	602.2
42.5°	536.1	543.3	557.8	578.1	585.4
45°	509.6	518.0	536.1	559.0	568.5
47.5°	483.0	492.7	513.2	539.7	550.5
50°	452.9	465.0	490.3	520.4	532.5
52.5°	424.0	438.5	466.2	499.9	515.6
55°	393.9	408.3	444.5	479.4	496.3
57.5°	360.1	379.4	419.2	458.9	477.0
60°	328.9	346.9	395.1	438.5	456.5
62.5°	295.2	319.3	371.0	416.8	434.8
65°	260.2	286.7	345.7	391.4	409.5
67.5°	228.9	257.8	320.5	366.1	384.2
70°	191.5	227.7	292.7	338.4	356.5
72.5°	156.6	196.3	263.8	308.4	325.3
75°	122.8	167.4	233.7	273.5	281.9
77.5°	91.6	138.5	202.4	219.2	213.2
80°	65.1	110.9	157.8	149.3	152.9
82.5°	42.2	84.4	97.6	110.9	114.4
85°	24.1	49.4	60.3	65.1	67.5
87.5°	10.8	18.1	24.1	24.1	22.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)