

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: P274796

Luminaire Tested: **24CZ2-40-RDP-UNV-L935-CD1-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P274796
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-40-RDP-UNV-L935-CD1-U
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI
Light Source: (84) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

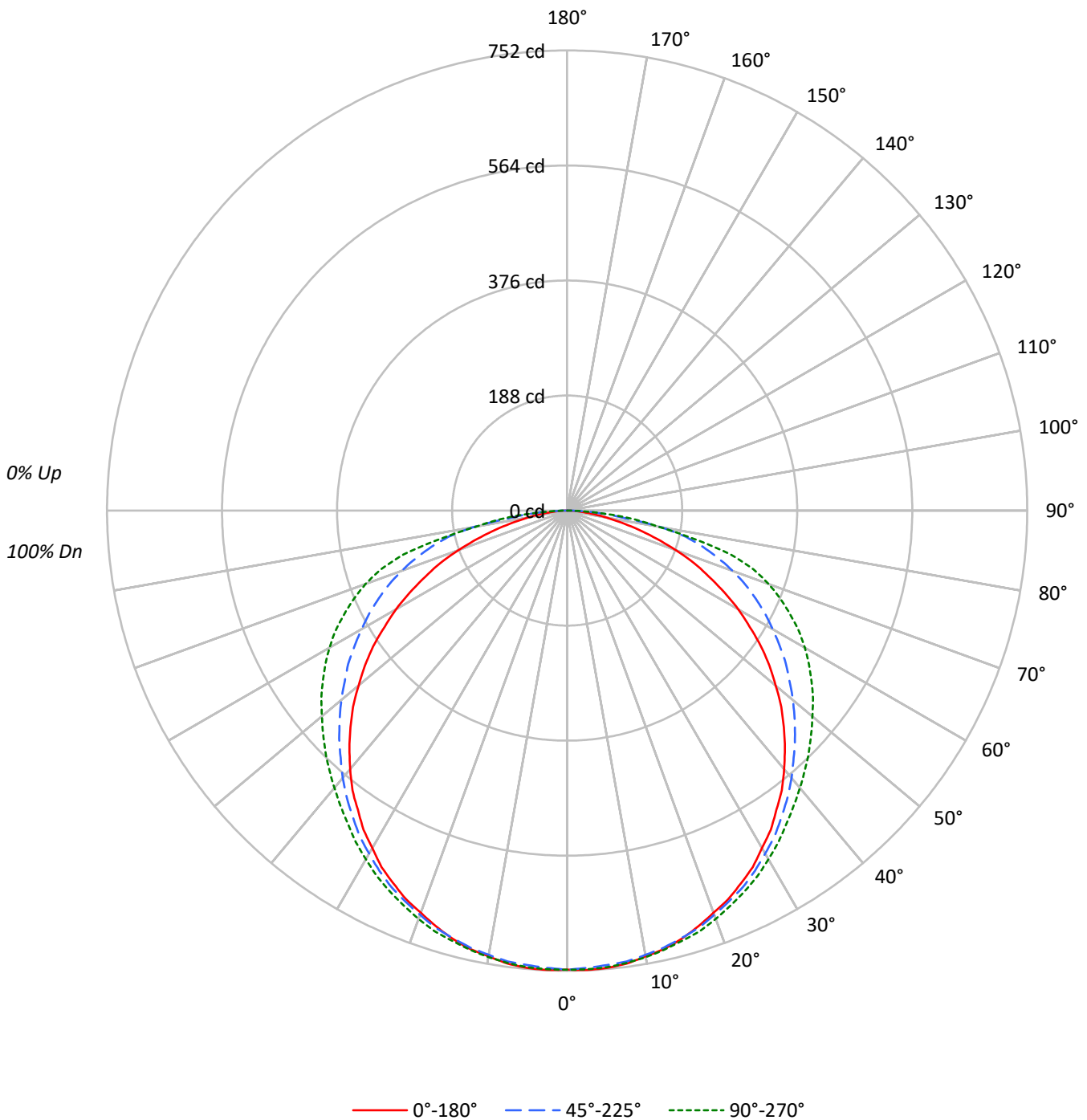
Lumens per Lamp: N/A
Luminaire Lumens: 2386.0 lumens
Efficiency: N/A
Efficacy: 65.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.2
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	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°	1010	1010	1010
5°	1013	1007	1012
10°	1011	1007	1012
15°	1009	1007	1014
20°	1001	1007	1017
25°	998	1008	1019
30°	989	1006	1022
35°	980	1003	1026
40°	969	1002	1039
45°	953	1002	1063
50°	931	1008	1095
55°	908	1024	1144
60°	869	1045	1207
65°	814	1082	1281
70°	740	1131	1378
75°	627	1194	1439
80°	495	1201	1165
85°	366	914	1024



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.2	3.0
10°-20°	204.8	8.6
20°-30°	313.2	13.1
30°-40°	382.9	16.0
40°-50°	408.1	17.1
50°-60°	390.2	16.4
60°-70°	330.6	13.9
70°-80°	222.2	9.3
80°-90°	62.7	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°	589.3	24.7
0°-40°	972.2	40.7
0°-60°	1770.6	74.2
0°-90°	2386.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2386.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	750	750	750	750	750	
5°	750	749	746	749	749	71
15°	724	724	723	729	728	204
25°	672	675	679	685	686	310
35°	596	601	611	622	625	374
45°	501	509	527	549	559	386
55°	387	401	437	471	488	345
65°	256	282	340	385	402	254
75°	121	164	230	269	277	129
85°	24	48	59	64	66	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	750.3	750.3	750.3	750.3	750.3
2.5°	751.5	751.5	748.0	750.3	750.3
5°	750.3	749.1	745.6	749.1	749.1
7.5°	746.8	745.6	743.2	746.8	745.6
10°	739.7	739.7	737.3	740.9	740.9
12.5°	733.8	732.6	731.4	736.1	734.9
15°	724.3	724.3	723.1	729.0	727.8
17.5°	712.5	713.6	714.8	719.6	720.7
20°	699.4	701.8	703.0	710.1	710.1
22.5°	687.6	688.8	691.2	698.3	698.3
25°	672.2	674.6	679.3	685.2	686.4
27.5°	656.8	658.0	663.9	672.2	673.4
30°	636.7	640.3	647.4	656.8	658.0
32.5°	619.0	622.5	630.8	640.3	642.6
35°	596.5	601.2	610.7	622.5	624.9
37.5°	576.4	579.9	591.7	604.8	608.3
40°	551.5	558.6	570.4	585.8	591.7
42.5°	526.7	533.8	548.0	568.1	575.2
45°	500.6	508.9	526.7	549.1	558.6
47.5°	474.6	484.0	504.2	530.2	540.9
50°	445.0	456.8	481.7	511.3	523.1
52.5°	416.6	430.8	458.0	491.1	506.5
55°	387.0	401.2	436.7	471.0	487.6
57.5°	353.9	372.8	411.9	450.9	468.7
60°	323.1	340.8	388.2	430.8	448.5
62.5°	290.0	313.6	364.5	409.5	427.2
65°	255.6	281.7	339.7	384.6	402.4
67.5°	224.9	253.3	314.8	359.8	377.5
70°	188.2	223.7	287.6	332.6	350.3
72.5°	153.9	192.9	259.2	303.0	319.5
75°	120.7	164.5	229.6	268.7	276.9
77.5°	89.9	136.1	198.8	215.4	209.5
80°	63.9	108.9	155.0	146.8	150.3
82.5°	41.4	82.8	95.9	108.9	112.4
85°	23.7	48.5	59.2	63.9	66.3
87.5°	10.7	17.8	23.7	23.7	22.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)