

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: P274792

Luminaire Tested: **24CZ2-40HE-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: P274792
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: 24CZ2-40HE-RDP-UNV-L935-CD1-U
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI
Light Source: (168) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2291.0 lumens
Efficiency: N/A
Efficacy: 74.9 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

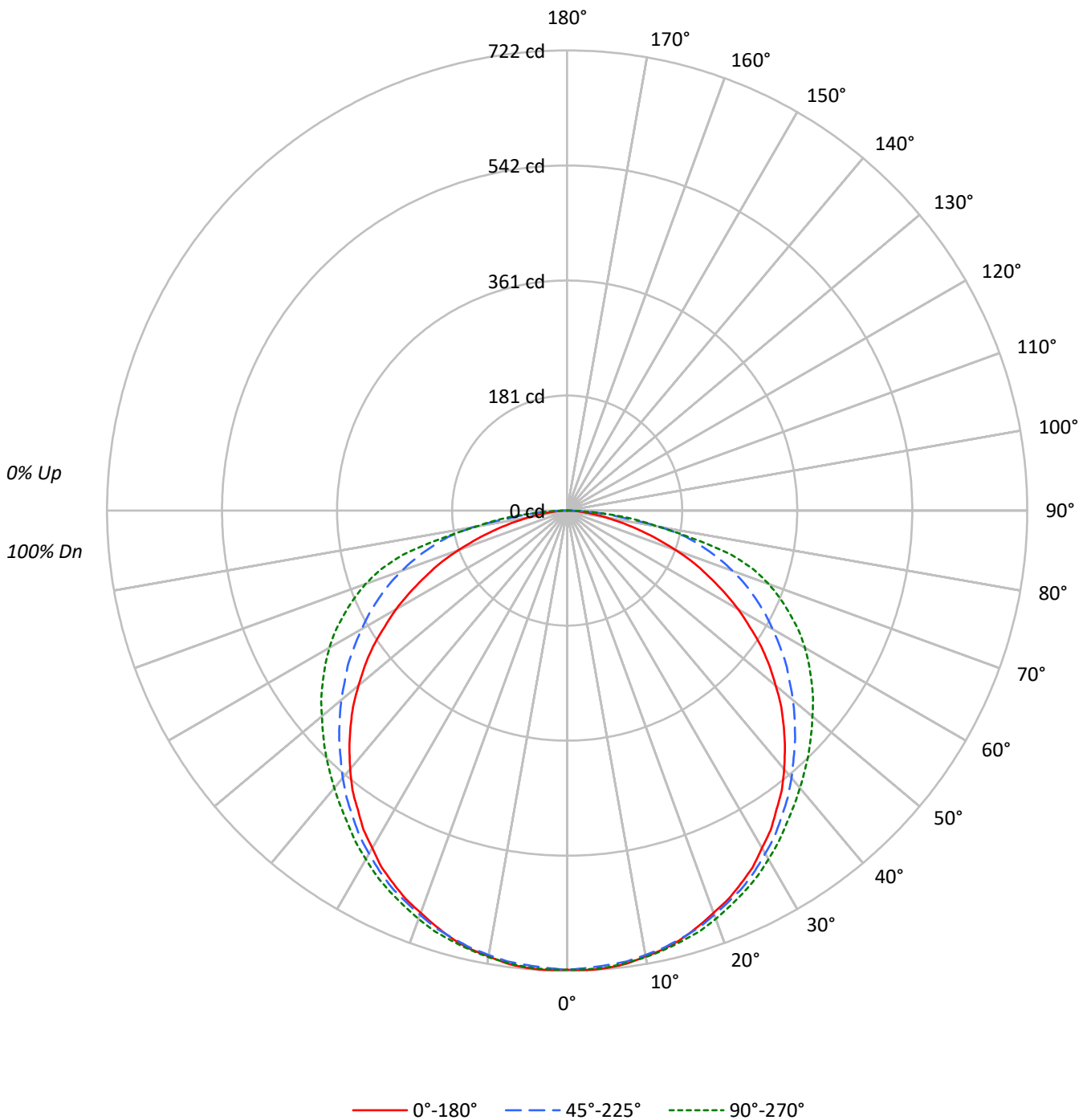
Input Watts (W): 30.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			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	68	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°	969	969	969
5°	973	967	972
10°	970	967	972
15°	969	967	974
20°	962	966	976
25°	958	968	978
30°	950	966	982
35°	941	963	986
40°	930	962	998
45°	915	962	1021
50°	894	968	1051
55°	872	984	1098
60°	835	1003	1159
65°	782	1038	1230
70°	711	1086	1323
75°	603	1146	1382
80°	476	1154	1118
85°	350	877	982



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.3	3.0
10°-20°	196.7	8.6
20°-30°	300.8	13.1
30°-40°	367.7	16.0
40°-50°	391.9	17.1
50°-60°	374.7	16.4
60°-70°	317.4	13.9
70°-80°	213.3	9.3
80°-90°	60.2	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°	565.8	24.7
0°-40°	933.5	40.7
0°-60°	1700.1	74.2
0°-90°	2291.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2291.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	720	720	720	720	720	
5°	720	719	716	719	719	68
15°	696	696	694	700	699	196
25°	646	648	652	658	659	297
35°	573	577	586	598	600	359
45°	481	489	506	527	536	371
55°	372	385	419	452	468	331
65°	246	270	326	369	386	244
75°	116	158	220	258	266	124
85°	23	47	57	61	64	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	720.5	720.5	720.5	720.5	720.5
2.5°	721.6	721.6	718.2	720.5	720.5
5°	720.5	719.3	715.9	719.3	719.3
7.5°	717.0	715.9	713.6	717.0	715.9
10°	710.2	710.2	708.0	711.4	711.4
12.5°	704.5	703.4	702.3	706.8	705.7
15°	695.5	695.5	694.3	700.0	698.9
17.5°	684.1	685.2	686.4	690.9	692.0
20°	671.6	673.9	675.0	681.8	681.8
22.5°	660.2	661.4	663.6	670.5	670.5
25°	645.5	647.7	652.3	658.0	659.1
27.5°	630.7	631.8	637.5	645.5	646.6
30°	611.4	614.8	621.6	630.7	631.8
32.5°	594.3	597.7	605.7	614.8	617.0
35°	572.7	577.3	586.4	597.7	600.0
37.5°	553.4	556.8	568.2	580.7	584.1
40°	529.5	536.4	547.7	562.5	568.2
42.5°	505.7	512.5	526.1	545.5	552.3
45°	480.7	488.6	505.7	527.3	536.4
47.5°	455.7	464.8	484.1	509.1	519.3
50°	427.3	438.6	462.5	490.9	502.3
52.5°	400.0	413.6	439.8	471.6	486.4
55°	371.6	385.2	419.3	452.3	468.2
57.5°	339.8	358.0	395.5	433.0	450.0
60°	310.2	327.3	372.7	413.6	430.7
62.5°	278.4	301.1	350.0	393.2	410.2
65°	245.5	270.5	326.1	369.3	386.4
67.5°	215.9	243.2	302.3	345.5	362.5
70°	180.7	214.8	276.1	319.3	336.4
72.5°	147.7	185.2	248.9	290.9	306.8
75°	115.9	158.0	220.5	258.0	265.9
77.5°	86.4	130.7	190.9	206.8	201.1
80°	61.4	104.5	148.9	140.9	144.3
82.5°	39.8	79.5	92.0	104.5	108.0
85°	22.7	46.6	56.8	61.4	63.6
87.5°	10.2	17.0	22.7	22.7	21.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)