

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: P391343

Luminaire Tested: **24CZ2-40VHE-RDP-UNV-L930-CD1-U**

Issue Date: 2/28/2020

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: P391343
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-40VHE-RDP-UNV-L930-CD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2243.0 lumens
Efficiency: N/A
Efficacy: 85.6 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

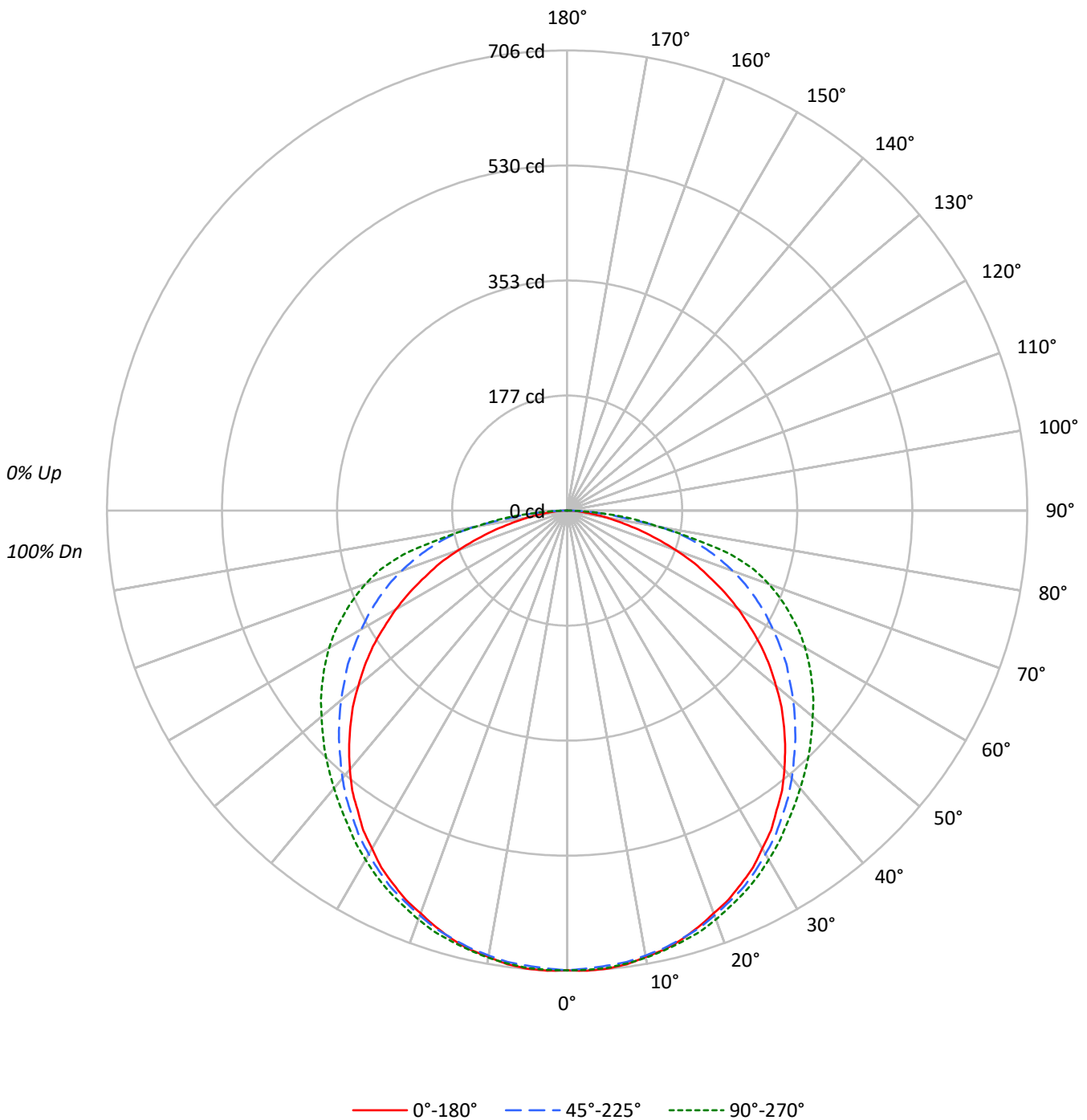
Input Watts (W): 26.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	949	949	949
5°	953	947	951
10°	950	947	952
15°	948	947	953
20°	941	946	956
25°	938	948	958
30°	930	946	961
35°	921	943	965
40°	911	942	977
45°	895	942	999
50°	876	948	1029
55°	853	963	1075
60°	817	982	1135
65°	765	1017	1204
70°	696	1064	1295
75°	590	1122	1353
80°	466	1129	1095
85°	344	858	962



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.9	3.0
10°-20°	192.6	8.6
20°-30°	294.5	13.1
30°-40°	360.0	16.0
40°-50°	383.7	17.1
50°-60°	366.9	16.4
60°-70°	310.8	13.9
70°-80°	208.8	9.3
80°-90°	58.9	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°	554.0	24.7
0°-40°	913.9	40.7
0°-60°	1664.5	74.2
0°-90°	2243.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2243.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	705	705	705	705	705	
5°	705	704	701	704	704	67
15°	681	681	680	685	684	192
25°	632	634	639	644	645	291
35°	561	565	574	585	587	351
45°	471	478	495	516	525	363
55°	364	377	410	443	458	324
65°	240	265	319	362	378	239
75°	114	155	216	252	260	122
85°	22	46	56	60	62	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	705.4	705.4	705.4	705.4	705.4
2.5°	706.5	706.5	703.1	705.4	705.4
5°	705.4	704.2	700.9	704.2	704.2
7.5°	702.0	700.9	698.7	702.0	700.9
10°	695.3	695.3	693.1	696.5	696.5
12.5°	689.8	688.7	687.6	692.0	690.9
15°	680.9	680.9	679.8	685.3	684.2
17.5°	669.8	670.9	672.0	676.4	677.5
20°	657.5	659.7	660.9	667.5	667.5
22.5°	646.4	647.5	649.7	656.4	656.4
25°	631.9	634.2	638.6	644.2	645.3
27.5°	617.5	618.6	624.1	631.9	633.0
30°	598.6	601.9	608.6	617.5	618.6
32.5°	581.9	585.2	593.0	601.9	604.1
35°	560.7	565.2	574.1	585.2	587.4
37.5°	541.8	545.2	556.3	568.5	571.9
40°	518.5	525.1	536.3	550.7	556.3
42.5°	495.1	501.8	515.1	534.0	540.7
45°	470.6	478.4	495.1	516.2	525.1
47.5°	446.1	455.0	473.9	498.4	508.4
50°	418.3	429.4	452.8	480.6	491.7
52.5°	391.6	405.0	430.6	461.7	476.2
55°	363.8	377.2	410.5	442.8	458.4
57.5°	332.7	350.5	387.2	423.9	440.6
60°	303.7	320.4	364.9	405.0	421.7
62.5°	272.6	294.8	342.7	384.9	401.6
65°	240.3	264.8	319.3	361.6	378.3
67.5°	211.4	238.1	295.9	338.2	354.9
70°	176.9	210.3	270.4	312.6	329.3
72.5°	144.6	181.3	243.6	284.8	300.4
75°	113.5	154.6	215.8	252.5	260.3
77.5°	84.6	127.9	186.9	202.5	196.9
80°	60.1	102.4	145.7	138.0	141.3
82.5°	38.9	77.9	90.1	102.4	105.7
85°	22.3	45.6	55.6	60.1	62.3
87.5°	10.0	16.7	22.3	22.3	21.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)