

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: P391252

Luminaire Tested: **24CZ2-30VHE-RDP-UNV-L940-CD1-SWPD1-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: P391252
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: 24CZ2-30VHE-RDP-UNV-L940-CD1-SWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1708.4 lumens
Efficiency: N/A
Efficacy: 83.7 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

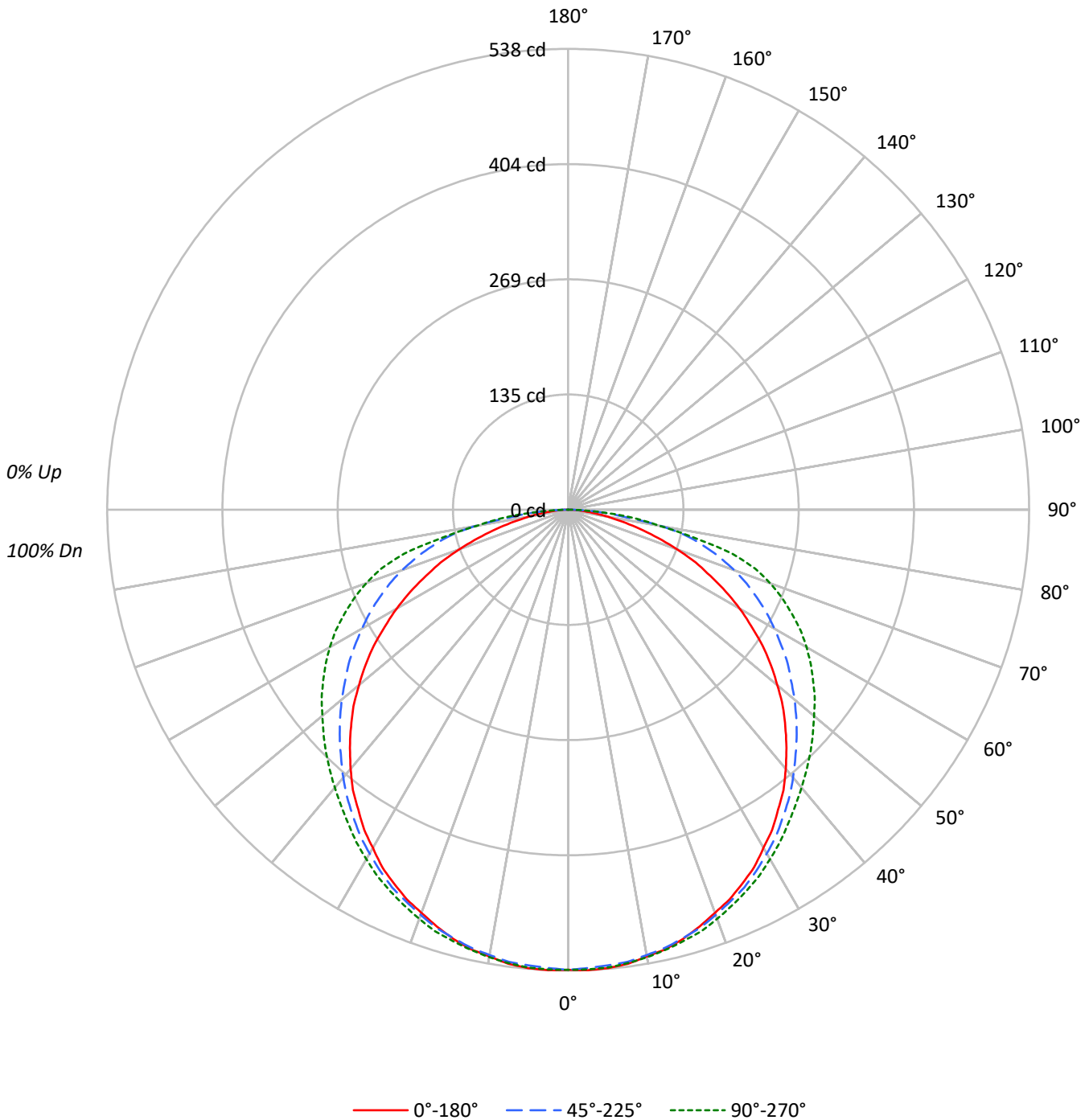
Input Watts (W): 20.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	723	723	723
5°	726	721	724
10°	724	721	725
15°	722	721	726
20°	717	721	728
25°	715	722	730
30°	708	720	732
35°	702	718	735
40°	694	717	744
45°	682	718	761
50°	667	722	784
55°	650	734	819
60°	622	748	864
65°	583	774	917
70°	530	810	987
75°	449	855	1031
80°	355	860	834
85°	261	655	733



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.0	3.0
10°-20°	146.7	8.6
20°-30°	224.3	13.1
30°-40°	274.2	16.0
40°-50°	292.2	17.1
50°-60°	279.4	16.4
60°-70°	236.7	13.9
70°-80°	159.1	9.3
80°-90°	44.9	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°	421.9	24.7
0°-40°	696.1	40.7
0°-60°	1267.8	74.2
0°-90°	1708.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1708.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	537	537	537	537	537	
5°	537	536	534	536	536	51
15°	519	519	518	522	521	146
25°	481	483	486	491	492	222
35°	427	430	437	446	447	268
45°	358	364	377	393	400	276
55°	277	287	313	337	349	247
65°	183	202	243	275	288	182
75°	86	118	164	192	198	93
85°	17	35	42	46	48	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	537.2	537.2	537.2	537.2	537.2
2.5°	538.1	538.1	535.5	537.2	537.2
5°	537.2	536.4	533.9	536.4	536.4
7.5°	534.7	533.9	532.2	534.7	533.9
10°	529.6	529.6	527.9	530.5	530.5
12.5°	525.4	524.5	523.7	527.1	526.2
15°	518.6	518.6	517.8	522.0	521.1
17.5°	510.1	511.0	511.8	515.2	516.1
20°	500.8	502.5	503.3	508.4	508.4
22.5°	492.3	493.2	494.9	500.0	500.0
25°	481.3	483.0	486.4	490.6	491.5
27.5°	470.3	471.1	475.4	481.3	482.2
30°	455.9	458.4	463.5	470.3	471.1
32.5°	443.2	445.7	451.7	458.4	460.1
35°	427.1	430.5	437.3	445.7	447.4
37.5°	412.7	415.2	423.7	433.0	435.6
40°	394.9	400.0	408.4	419.5	423.7
42.5°	377.1	382.2	392.3	406.7	411.8
45°	358.4	364.4	377.1	393.2	400.0
47.5°	339.8	346.6	361.0	379.6	387.3
50°	318.6	327.1	344.9	366.1	374.5
52.5°	298.3	308.4	327.9	351.7	362.7
55°	277.1	287.3	312.7	337.3	349.1
57.5°	253.4	266.9	294.9	322.9	335.6
60°	231.3	244.0	277.9	308.4	321.2
62.5°	207.6	224.6	261.0	293.2	305.9
65°	183.0	201.7	243.2	275.4	288.1
67.5°	161.0	181.3	225.4	257.6	270.3
70°	134.7	160.2	205.9	238.1	250.8
72.5°	110.2	138.1	185.6	216.9	228.8
75°	86.4	117.8	164.4	192.4	198.3
77.5°	64.4	97.4	142.4	154.2	150.0
80°	45.8	78.0	111.0	105.1	107.6
82.5°	29.7	59.3	68.6	78.0	80.5
85°	16.9	34.7	42.4	45.8	47.5
87.5°	7.6	12.7	16.9	16.9	16.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)