

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: P391439

Luminaire Tested: **24CZ2-50VHE-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: P391439
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: 24CZ2-50VHE-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: 2810.1 lumens
Efficiency: N/A
Efficacy: 85.9 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

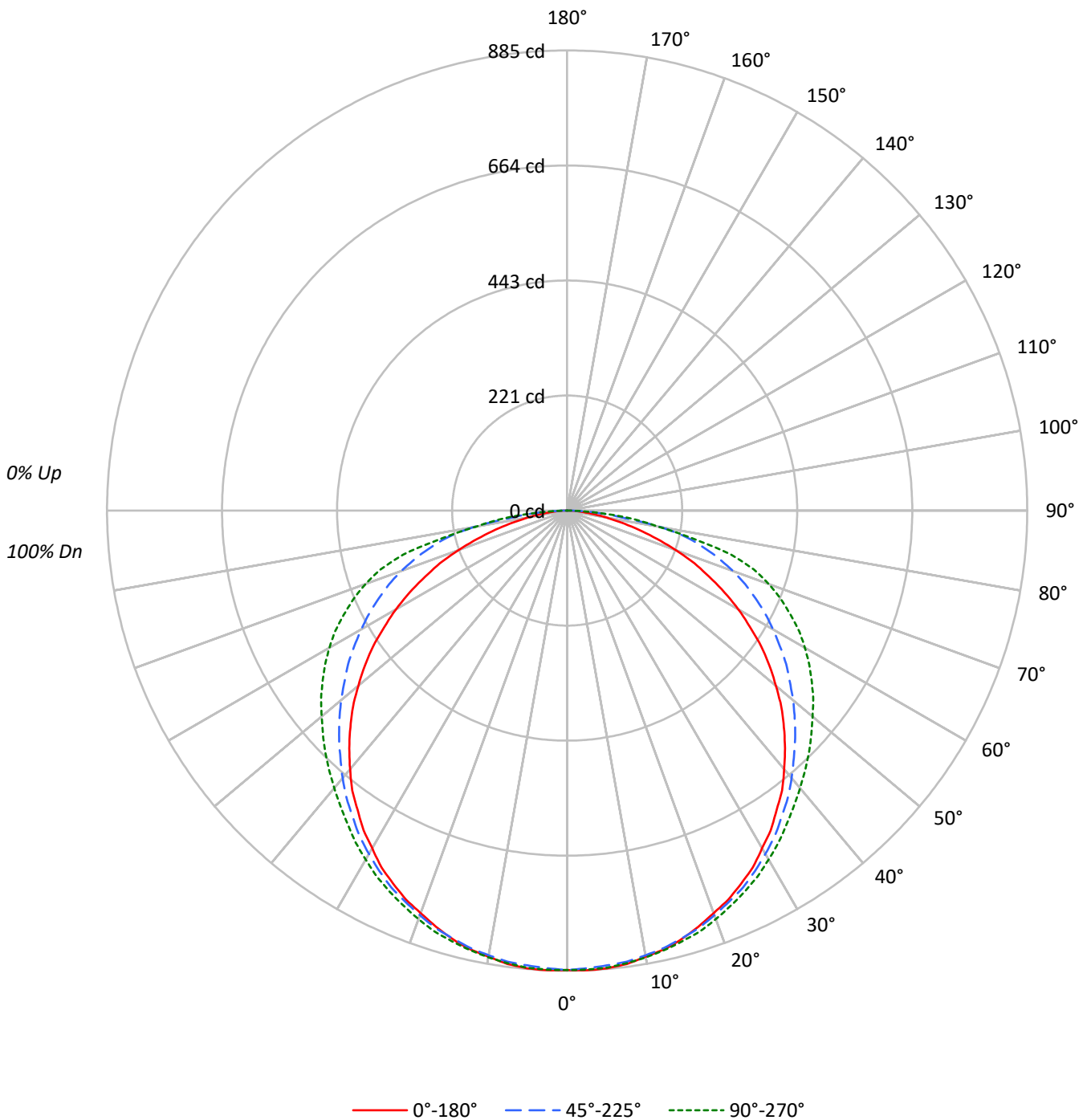
Input Watts (W): 32.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1189	1189	1189
5°	1194	1186	1192
10°	1190	1186	1192
15°	1188	1186	1194
20°	1180	1185	1197
25°	1175	1188	1200
30°	1165	1184	1204
35°	1154	1181	1209
40°	1141	1180	1224
45°	1122	1180	1252
50°	1097	1187	1290
55°	1069	1206	1347
60°	1024	1230	1422
65°	959	1273	1509
70°	872	1332	1623
75°	739	1406	1696
80°	583	1415	1371
85°	431	1076	1206



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.8	3.0
10°-20°	241.3	8.6
20°-30°	368.9	13.1
30°-40°	451.0	16.0
40°-50°	480.7	17.1
50°-60°	459.6	16.4
60°-70°	389.3	13.9
70°-80°	261.7	9.3
80°-90°	73.8	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°	694.0	24.7
0°-40°	1145.0	40.7
0°-60°	2085.3	74.2
0°-90°	2810.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2810.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	884	884	884	884	884	
5°	884	882	878	882	882	84
15°	853	853	852	859	857	241
25°	792	794	800	807	808	365
35°	702	708	719	733	736	440
45°	590	599	620	647	658	455
55°	456	472	514	555	574	406
65°	301	332	400	453	474	299
75°	142	194	270	316	326	152
85°	28	57	70	75	78	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	883.7	883.7	883.7	883.7	883.7
2.5°	885.1	885.1	880.9	883.7	883.7
5°	883.7	882.3	878.1	882.3	882.3
7.5°	879.5	878.1	875.3	879.5	878.1
10°	871.2	871.2	868.4	872.5	872.5
12.5°	864.2	862.8	861.4	867.0	865.6
15°	853.0	853.0	851.6	858.6	857.2
17.5°	839.1	840.5	841.9	847.5	848.9
20°	823.8	826.5	827.9	836.3	836.3
22.5°	809.8	811.2	814.0	822.4	822.4
25°	791.7	794.5	800.1	807.0	808.4
27.5°	773.6	775.0	781.9	791.7	793.1
30°	749.9	754.1	762.4	773.6	775.0
32.5°	729.0	733.2	742.9	754.1	756.9
35°	702.5	708.1	719.2	733.2	735.9
37.5°	678.8	683.0	696.9	712.3	716.4
40°	649.5	657.9	671.8	690.0	696.9
42.5°	620.3	628.6	645.3	669.0	677.4
45°	589.6	599.4	620.3	646.7	657.9
47.5°	558.9	570.1	593.8	624.4	637.0
50°	524.1	538.0	567.3	602.1	616.1
52.5°	490.6	507.4	539.4	578.4	596.6
55°	455.8	472.5	514.3	554.7	574.3
57.5°	416.8	439.1	485.1	531.1	552.0
60°	380.5	401.4	457.2	507.4	528.3
62.5°	341.5	369.4	429.3	482.3	503.2
65°	301.1	331.7	400.0	453.0	473.9
67.5°	264.8	298.3	370.8	423.7	444.6
70°	221.6	263.4	338.7	391.7	412.6
72.5°	181.2	227.2	305.3	356.8	376.3
75°	142.2	193.7	270.4	316.4	326.2
77.5°	105.9	160.3	234.2	253.7	246.7
80°	75.3	128.2	182.6	172.8	177.0
82.5°	48.8	97.6	112.9	128.2	132.4
85°	27.9	57.1	69.7	75.3	78.1
87.5°	12.5	20.9	27.9	27.9	26.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)