

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: P391350

Luminaire Tested: **24CZ2-40VHE-RDP-UNV-L950-CD1-SDWPD1-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: P391350
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-L950-CD1-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2404.9 lumens
Efficiency: N/A
Efficacy: 91.8 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

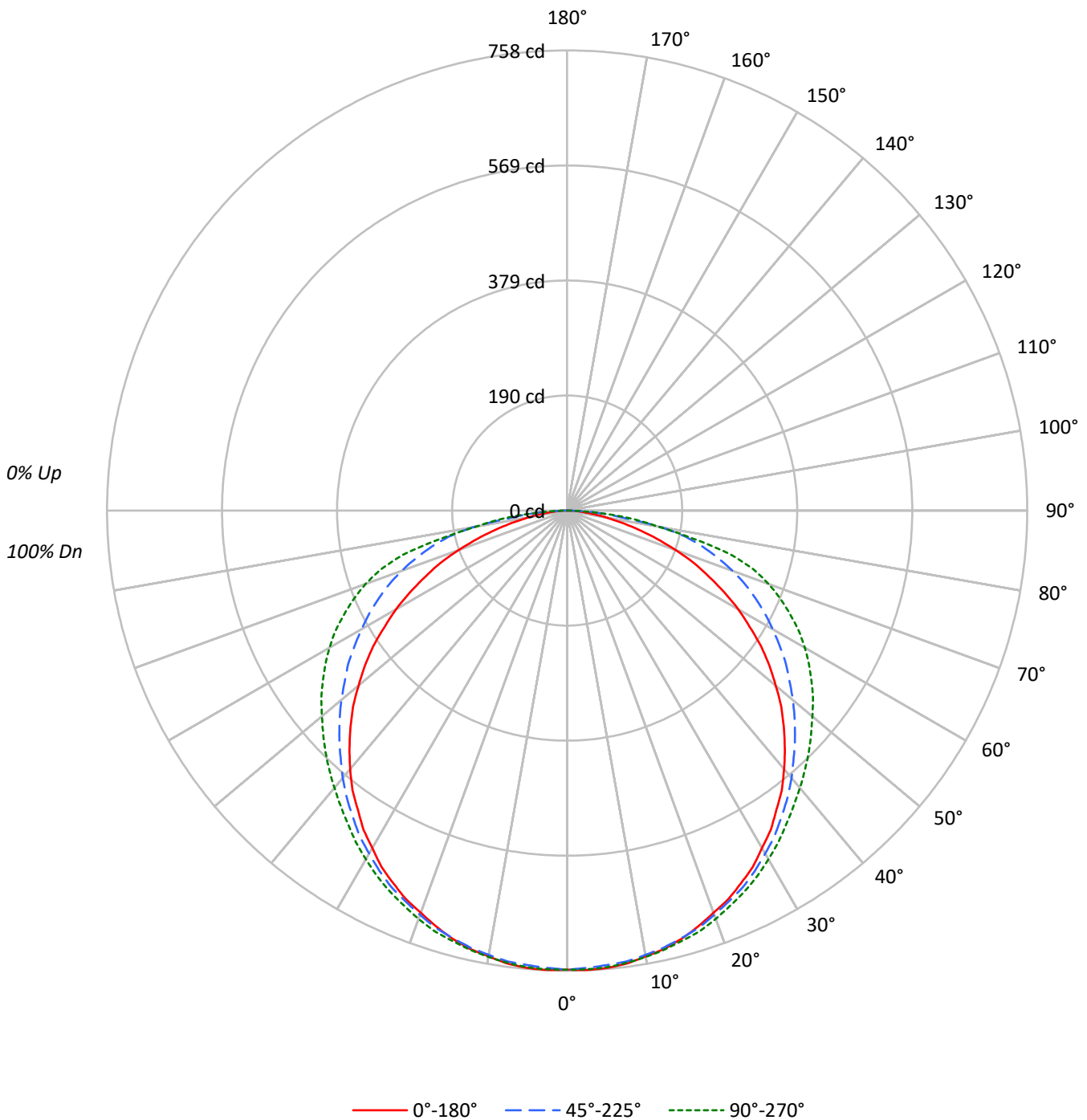
Input Watts (W): 26.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1018	1018	1018
5°	1021	1015	1020
10°	1019	1015	1020
15°	1017	1015	1022
20°	1009	1015	1025
25°	1006	1016	1027
30°	997	1014	1030
35°	987	1011	1034
40°	976	1010	1048
45°	960	1010	1071
50°	939	1016	1104
55°	915	1033	1153
60°	876	1053	1217
65°	820	1090	1291
70°	746	1140	1389
75°	633	1203	1451
80°	499	1211	1174
85°	369	920	1031



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.7	3.0
10°-20°	206.5	8.6
20°-30°	315.7	13.1
30°-40°	386.0	16.0
40°-50°	411.4	17.1
50°-60°	393.3	16.4
60°-70°	333.2	13.9
70°-80°	223.9	9.3
80°-90°	63.2	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°	593.9	24.7
0°-40°	979.9	40.7
0°-60°	1784.6	74.2
0°-90°	2404.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2404.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	756	756	756	756	756	
5°	756	755	752	755	755	72
15°	730	730	729	735	734	206
25°	678	680	685	691	692	312
35°	601	606	616	627	630	377
45°	505	513	531	554	563	389
55°	390	404	440	475	492	347
65°	258	284	342	388	406	256
75°	122	166	231	271	279	130
85°	24	49	60	64	67	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	756.3	756.3	756.3	756.3	756.3
2.5°	757.5	757.5	753.9	756.3	756.3
5°	756.3	755.1	751.5	755.1	755.1
7.5°	752.7	751.5	749.1	752.7	751.5
10°	745.5	745.5	743.2	746.7	746.7
12.5°	739.6	738.4	737.2	742.0	740.8
15°	730.0	730.0	728.8	734.8	733.6
17.5°	718.1	719.3	720.5	725.3	726.5
20°	705.0	707.4	708.6	715.7	715.7
22.5°	693.1	694.2	696.6	703.8	703.8
25°	677.5	679.9	684.7	690.7	691.9
27.5°	662.0	663.2	669.2	677.5	678.7
30°	641.8	645.3	652.5	662.0	663.2
32.5°	623.9	627.4	635.8	645.3	647.7
35°	601.2	606.0	615.5	627.4	629.8
37.5°	580.9	584.5	596.4	609.6	613.1
40°	555.9	563.0	575.0	590.5	596.4
42.5°	530.8	538.0	552.3	572.6	579.7
45°	504.6	512.9	530.8	553.5	563.0
47.5°	478.3	487.9	508.2	534.4	545.1
50°	448.5	460.4	485.5	515.3	527.2
52.5°	419.9	434.2	461.6	495.0	510.5
55°	390.1	404.4	440.2	474.8	491.5
57.5°	356.7	375.8	415.1	454.5	472.4
60°	325.7	343.5	391.3	434.2	452.1
62.5°	292.3	316.1	367.4	412.7	430.6
65°	257.7	283.9	342.4	387.7	405.6
67.5°	226.6	255.3	317.3	362.6	380.5
70°	189.7	225.5	289.9	335.2	353.1
72.5°	155.1	194.4	261.2	305.4	322.1
75°	121.7	165.8	231.4	270.8	279.1
77.5°	90.7	137.2	200.4	217.1	211.1
80°	64.4	109.7	156.3	147.9	151.5
82.5°	41.8	83.5	96.6	109.7	113.3
85°	23.9	48.9	59.6	64.4	66.8
87.5°	10.7	17.9	23.9	23.9	22.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)