

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: P391443

Luminaire Tested: **24CZ2-50VHE-RDP-UNV-L940-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: P391443
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-L940-CD1-SDWPD1-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: 2838.6 lumens
Efficiency: N/A
Efficacy: 86.8 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

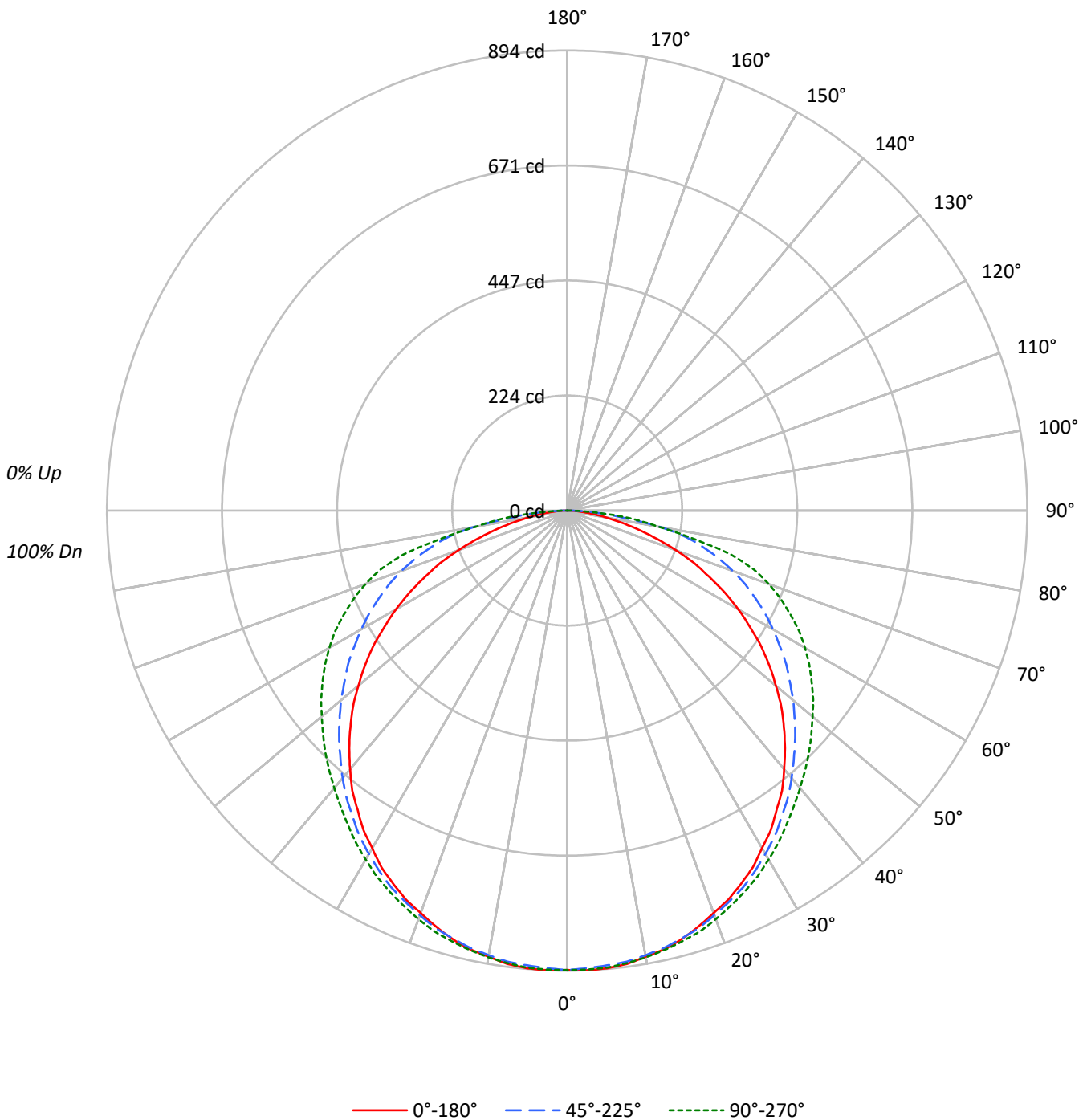
Input Watts (W): 32.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1201	1201	1201
5°	1206	1198	1204
10°	1202	1198	1204
15°	1200	1198	1206
20°	1191	1197	1210
25°	1187	1200	1212
30°	1177	1197	1216
35°	1166	1193	1221
40°	1152	1192	1237
45°	1133	1192	1265
50°	1108	1199	1303
55°	1080	1219	1361
60°	1034	1243	1436
65°	968	1287	1524
70°	881	1346	1640
75°	747	1420	1713
80°	589	1429	1385
85°	435	1087	1216



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.7	3.0
10°-20°	243.7	8.6
20°-30°	372.7	13.1
30°-40°	455.6	16.0
40°-50°	485.6	17.1
50°-60°	464.3	16.4
60°-70°	393.3	13.9
70°-80°	264.3	9.3
80°-90°	74.6	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°	701.0	24.7
0°-40°	1156.6	40.7
0°-60°	2106.4	74.2
0°-90°	2838.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2838.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	893	893	893	893	893	
5°	893	891	887	891	891	85
15°	862	862	860	867	866	243
25°	800	802	808	815	817	369
35°	710	715	726	741	743	445
45°	596	605	627	653	665	459
55°	460	477	520	560	580	410
65°	304	335	404	458	479	302
75°	144	196	273	320	330	154
85°	28	58	70	76	79	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	892.7	892.7	892.7	892.7	892.7
2.5°	894.1	894.1	889.8	892.7	892.7
5°	892.7	891.3	887.0	891.3	891.3
7.5°	888.4	887.0	884.2	888.4	887.0
10°	880.0	880.0	877.2	881.4	881.4
12.5°	872.9	871.5	870.1	875.8	874.4
15°	861.7	861.7	860.3	867.3	865.9
17.5°	847.6	849.0	850.4	856.1	857.5
20°	832.1	834.9	836.3	844.8	844.8
22.5°	818.0	819.4	822.3	830.7	830.7
25°	799.7	802.5	808.2	815.2	816.6
27.5°	781.4	782.8	789.9	799.7	801.1
30°	757.5	761.7	770.2	781.4	782.8
32.5°	736.4	740.6	750.5	761.7	764.5
35°	709.6	715.3	726.5	740.6	743.4
37.5°	685.7	689.9	704.0	719.5	723.7
40°	656.1	664.6	678.6	696.9	704.0
42.5°	626.6	635.0	651.9	675.8	684.3
45°	595.6	605.4	626.6	653.3	664.6
47.5°	564.6	575.9	599.8	630.8	643.4
50°	529.4	543.5	573.0	608.2	622.3
52.5°	495.6	512.5	544.9	584.3	602.6
55°	460.4	477.3	519.5	560.4	580.1
57.5°	421.0	443.5	490.0	536.4	557.6
60°	384.4	405.5	461.8	512.5	533.6
62.5°	345.0	373.1	433.7	487.2	508.3
65°	304.1	335.1	404.1	457.6	478.7
67.5°	267.5	301.3	374.5	428.0	449.1
70°	223.9	266.1	342.1	395.6	416.8
72.5°	183.0	229.5	308.3	360.4	380.2
75°	143.6	195.7	273.1	319.6	329.5
77.5°	107.0	161.9	236.5	256.3	249.2
80°	76.0	129.5	184.4	174.6	178.8
82.5°	49.3	98.6	114.0	129.5	133.8
85°	28.2	57.7	70.4	76.0	78.8
87.5°	12.7	21.1	28.2	28.2	26.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)