

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: P391634

Luminaire Tested: **24CZ2-70VHE-RDP-UNV-L935-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: P391634
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: 24CZ2-70VHE-RDP-UNV-L935-CD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4014.0 lumens
Efficiency: N/A
Efficacy: 87.8 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

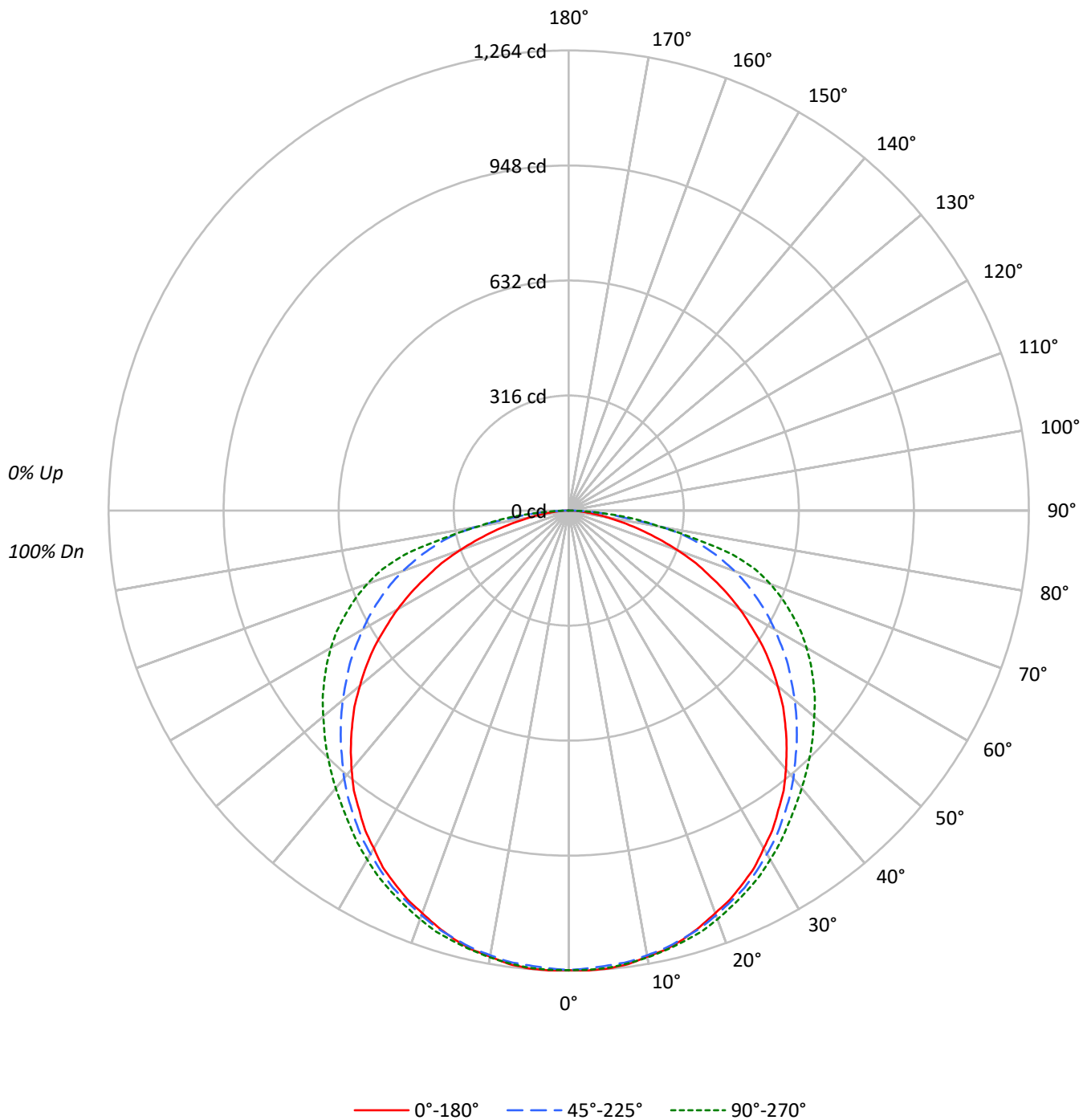
Input Watts (W): 45.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	108	103	98	94	105	100	96	92		96	93	89		92	89	87		88	86	84
2	97	89	81	75	95	87	80	74		83	77	72		80	75	71		77	73	69
3	88	77	68	62	86	76	67	61		72	66	60		70	64	59		67	62	58
4	81	68	59	52	78	67	58	51		64	57	51		62	55	50		59	54	49
5	74	60	51	44	72	59	51	44		57	49	43		55	48	43		53	47	42
6	68	54	45	38	66	53	45	38		51	44	38		50	43	37		48	42	37
7	63	49	40	34	61	48	40	34		47	39	33		45	38	33		44	38	33
8	59	45	36	30	57	44	36	30		43	35	30		41	34	29		40	34	29
9	55	41	33	27	53	40	32	27		39	32	27		38	31	26		37	31	26
10	51	38	30	24	50	37	29	24		36	29	24		35	29	24		34	28	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1698	1698	1698
5°	1705	1694	1702
10°	1700	1695	1703
15°	1697	1695	1706
20°	1685	1693	1710
25°	1679	1697	1714
30°	1664	1692	1720
35°	1648	1688	1727
40°	1630	1686	1749
45°	1603	1686	1788
50°	1567	1696	1842
55°	1527	1723	1924
60°	1463	1757	2031
65°	1369	1819	2155
70°	1245	1903	2318
75°	1056	2008	2422
80°	833	2021	1960
85°	614	1536	1721



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.7	3.0
10°-20°	344.6	8.6
20°-30°	527.0	13.1
30°-40°	644.2	16.0
40°-50°	686.6	17.1
50°-60°	656.5	16.4
60°-70°	556.1	13.9
70°-80°	373.8	9.3
80°-90°	105.4	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°	991.3	24.7
0°-40°	1635.6	40.7
0°-60°	2978.7	74.2
0°-90°	4014.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4014.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1262	1262	1262	1262	1262	
5°	1262	1260	1254	1260	1260	120
15°	1218	1218	1216	1226	1224	344
25°	1131	1135	1143	1153	1155	521
35°	1004	1011	1027	1047	1051	629
45°	842	856	886	924	940	650
55°	651	675	735	792	820	580
65°	430	474	571	647	677	427
75°	203	277	386	452	466	217
85°	40	82	100	108	112	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1262.3	1262.3	1262.3	1262.3	1262.3
2.5°	1264.3	1264.3	1258.3	1262.3	1262.3
5°	1262.3	1260.3	1254.3	1260.3	1260.3
7.5°	1256.3	1254.3	1250.3	1256.3	1254.3
10°	1244.4	1244.4	1240.4	1246.4	1246.4
12.5°	1234.4	1232.4	1230.4	1238.4	1236.4
15°	1218.5	1218.5	1216.5	1226.5	1224.5
17.5°	1198.6	1200.6	1202.6	1210.5	1212.5
20°	1176.7	1180.7	1182.6	1194.6	1194.6
22.5°	1156.8	1158.8	1162.7	1174.7	1174.7
25°	1130.9	1134.9	1142.8	1152.8	1154.8
27.5°	1105.0	1107.0	1116.9	1130.9	1132.9
30°	1071.2	1077.1	1089.1	1105.0	1107.0
32.5°	1041.3	1047.3	1061.2	1077.1	1081.1
35°	1003.5	1011.4	1027.4	1047.3	1051.2
37.5°	969.6	975.6	995.5	1017.4	1023.4
40°	927.8	939.7	959.7	985.5	995.5
42.5°	886.0	897.9	921.8	955.7	967.6
45°	842.2	856.1	886.0	923.8	939.7
47.5°	798.4	814.3	848.2	892.0	909.9
50°	748.6	768.5	810.3	860.1	880.0
52.5°	700.8	724.7	770.5	826.3	852.1
55°	651.1	674.9	734.7	792.4	820.3
57.5°	595.3	627.2	692.9	758.6	788.4
60°	543.5	573.4	653.0	724.7	754.6
62.5°	487.8	527.6	613.2	688.9	718.7
65°	430.1	473.9	571.4	647.1	676.9
67.5°	378.3	426.1	529.6	605.3	635.1
70°	316.6	376.3	483.8	559.5	589.3
72.5°	258.8	324.5	436.0	509.7	537.6
75°	203.1	276.7	386.3	452.0	465.9
77.5°	151.3	229.0	334.5	362.4	352.4
80°	107.5	183.2	260.8	246.9	252.9
82.5°	69.7	139.4	161.3	183.2	189.1
85°	39.8	81.6	99.5	107.5	111.5
87.5°	17.9	29.9	39.8	39.8	37.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)