

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: P391629

Luminaire Tested: **24CZ2-70VHE-RDP-UNV-L930-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: P391629
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-L930-CD1-SDWPD1-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: 3821.9 lumens
Efficiency: N/A
Efficacy: 83.6 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

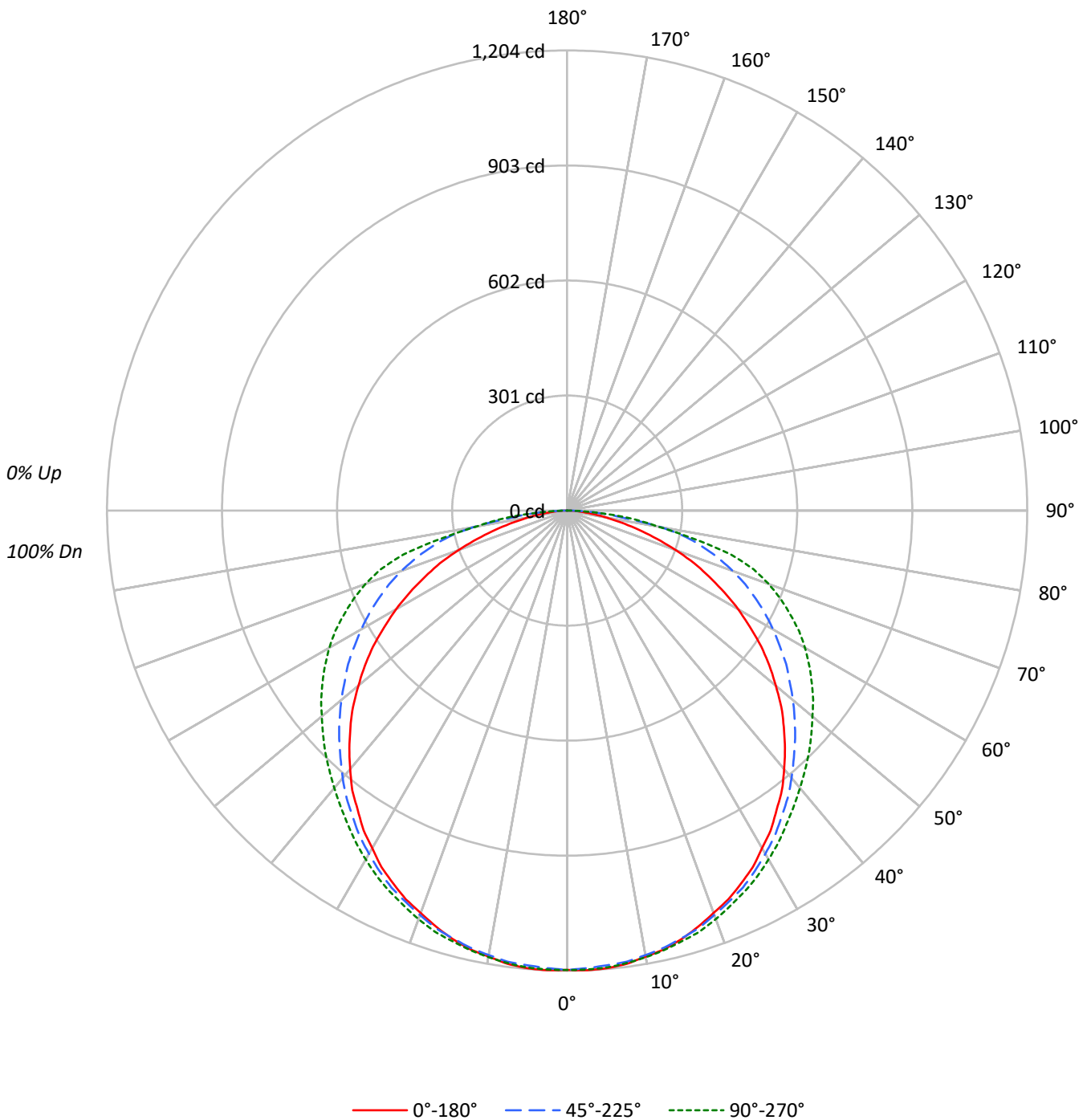
Input Watts (W): 45.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1617	1617	1617
5°	1623	1613	1621
10°	1619	1614	1621
15°	1616	1613	1624
20°	1604	1612	1629
25°	1599	1615	1632
30°	1585	1611	1638
35°	1569	1607	1644
40°	1552	1605	1665
45°	1526	1605	1703
50°	1492	1615	1754
55°	1454	1641	1832
60°	1393	1673	1933
65°	1304	1732	2052
70°	1186	1812	2207
75°	1005	1912	2306
80°	793	1924	1866
85°	585	1463	1639



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.0	3.0
10°-20°	328.1	8.6
20°-30°	501.8	13.1
30°-40°	613.4	16.0
40°-50°	653.8	17.1
50°-60°	625.1	16.4
60°-70°	529.5	13.9
70°-80°	355.9	9.3
80°-90°	100.4	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°	943.9	24.7
0°-40°	1557.3	40.7
0°-60°	2836.1	74.2
0°-90°	3821.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3821.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1202	1202	1202	1202	1202	
5°	1202	1200	1194	1200	1200	114
15°	1160	1160	1158	1168	1166	327
25°	1077	1081	1088	1098	1100	496
35°	955	963	978	997	1001	599
45°	802	815	844	880	895	619
55°	620	643	700	754	781	552
65°	410	451	544	616	644	407
75°	193	264	368	430	444	207
85°	38	78	95	102	106	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1201.9	1201.9	1201.9	1201.9	1201.9
2.5°	1203.8	1203.8	1198.1	1201.9	1201.9
5°	1201.9	1200.0	1194.3	1200.0	1200.0
7.5°	1196.2	1194.3	1190.5	1196.2	1194.3
10°	1184.8	1184.8	1181.0	1186.7	1186.7
12.5°	1175.3	1173.4	1171.5	1179.1	1177.2
15°	1160.2	1160.2	1158.3	1167.8	1165.9
17.5°	1141.2	1143.1	1145.0	1152.6	1154.5
20°	1120.4	1124.2	1126.1	1137.4	1137.4
22.5°	1101.4	1103.3	1107.1	1118.5	1118.5
25°	1076.8	1080.6	1088.1	1097.6	1099.5
27.5°	1052.1	1054.0	1063.5	1076.8	1078.7
30°	1019.9	1025.6	1037.0	1052.1	1054.0
32.5°	991.5	997.1	1010.4	1025.6	1029.4
35°	955.4	963.0	978.2	997.1	1000.9
37.5°	923.2	928.9	947.9	968.7	974.4
40°	883.4	894.8	913.7	938.4	947.9
42.5°	843.6	855.0	877.7	909.9	921.3
45°	801.9	815.2	843.6	879.6	894.8
47.5°	760.2	775.3	807.6	849.3	866.3
50°	712.8	731.7	771.6	818.9	837.9
52.5°	667.3	690.0	733.6	786.7	811.4
55°	619.9	642.6	699.5	754.5	781.0
57.5°	566.8	597.1	659.7	722.3	750.7
60°	517.5	546.0	621.8	690.0	718.5
62.5°	464.4	502.4	583.9	655.9	684.4
65°	409.5	451.2	544.1	616.1	644.5
67.5°	360.2	405.7	504.3	576.3	604.7
70°	301.4	358.3	460.7	532.7	561.1
72.5°	246.4	309.0	415.2	485.3	511.8
75°	193.4	263.5	367.8	430.3	443.6
77.5°	144.1	218.0	318.5	345.0	335.5
80°	102.4	174.4	248.3	235.1	240.8
82.5°	66.3	132.7	153.6	174.4	180.1
85°	37.9	77.7	94.8	102.4	106.2
87.5°	17.1	28.4	37.9	37.9	36.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)