

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: P390910

Luminaire Tested: **24CZ2-100VHE-RDP-UNV-L930-CD1-SWPD1-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: P390910
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: 24CZ2-100VHE-RDP-UNV-L930-CD1-SWPD1-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: 5585.0 lumens
Efficiency: N/A
Efficacy: 80.2 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

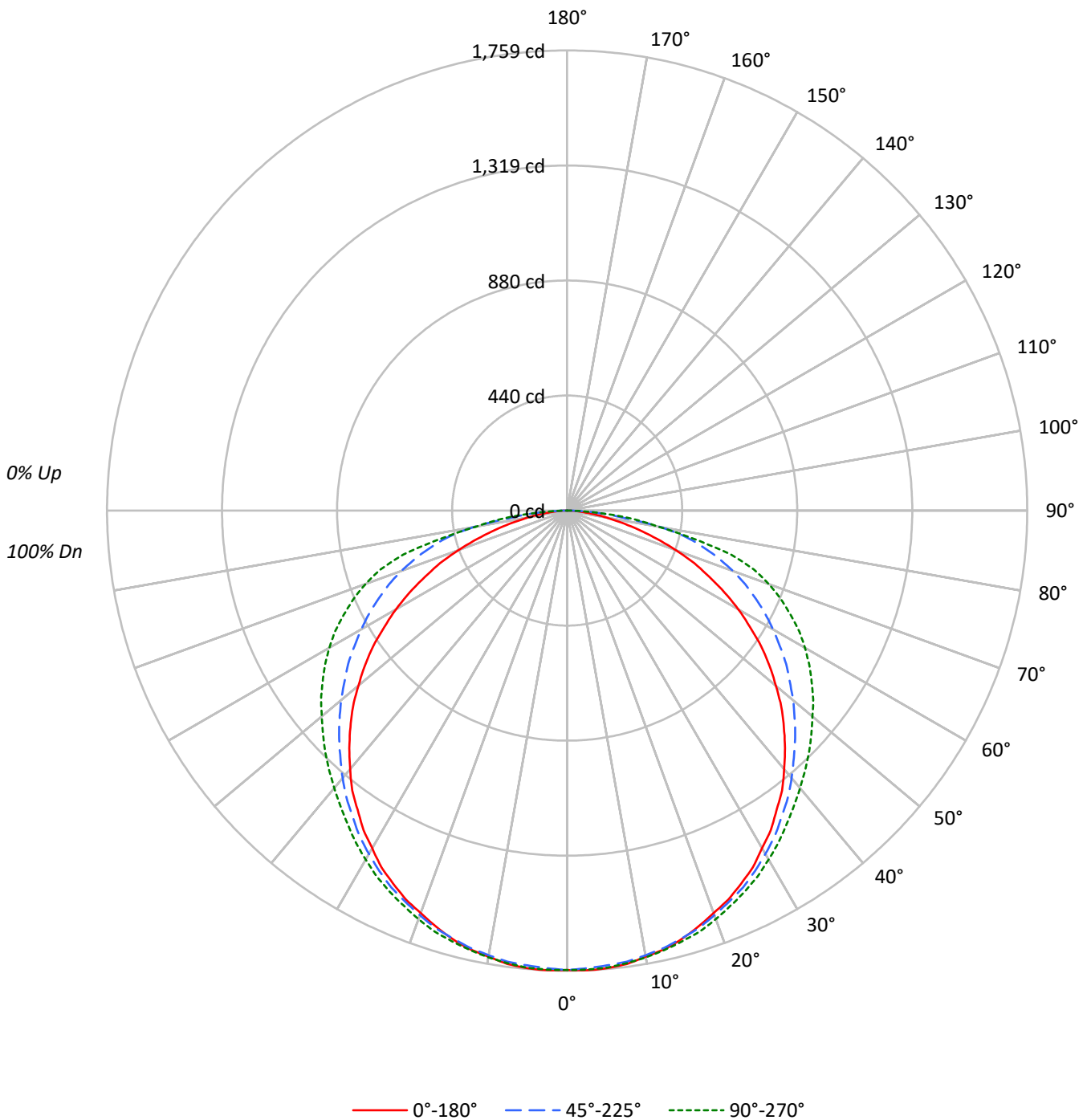
Input Watts (W): 69.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2363	2363	2363
5°	2372	2357	2368
10°	2366	2358	2369
15°	2362	2358	2373
20°	2344	2356	2380
25°	2336	2361	2385
30°	2316	2354	2393
35°	2293	2348	2403
40°	2267	2345	2433
45°	2230	2346	2488
50°	2180	2360	2563
55°	2125	2398	2677
60°	2035	2445	2825
65°	1905	2531	2999
70°	1733	2648	3226
75°	1469	2794	3370
80°	1159	2812	2726
85°	855	2138	2394



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.6	3.0
10°-20°	479.5	8.6
20°-30°	733.2	13.1
30°-40°	896.4	16.0
40°-50°	955.3	17.1
50°-60°	913.4	16.4
60°-70°	773.8	13.9
70°-80°	520.1	9.3
80°-90°	146.7	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°	1379.3	24.7
0°-40°	2275.7	40.7
0°-60°	4144.4	74.2
0°-90°	5585.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5585.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1756	1756	1756	1756	1756	
5°	1756	1754	1745	1754	1754	167
15°	1695	1695	1693	1706	1704	478
25°	1574	1579	1590	1604	1607	725
35°	1396	1407	1429	1457	1463	875
45°	1172	1191	1233	1285	1308	904
55°	906	939	1022	1102	1141	807
65°	598	659	795	900	942	594
75°	283	385	537	629	648	303
85°	55	114	138	150	155	69
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1756.3	1756.3	1756.3	1756.3	1756.3
2.5°	1759.1	1759.1	1750.8	1756.3	1756.3
5°	1756.3	1753.6	1745.2	1753.6	1753.6
7.5°	1748.0	1745.2	1739.7	1748.0	1745.2
10°	1731.4	1731.4	1725.9	1734.2	1734.2
12.5°	1717.5	1714.8	1712.0	1723.1	1720.3
15°	1695.4	1695.4	1692.6	1706.5	1703.7
17.5°	1667.7	1670.4	1673.2	1684.3	1687.1
20°	1637.2	1642.7	1645.5	1662.1	1662.1
22.5°	1609.5	1612.3	1617.8	1634.4	1634.4
25°	1573.5	1579.0	1590.1	1604.0	1606.7
27.5°	1537.5	1540.2	1554.1	1573.5	1576.3
30°	1490.4	1498.7	1515.3	1537.5	1540.2
32.5°	1448.8	1457.1	1476.5	1498.7	1504.2
35°	1396.2	1407.3	1429.4	1457.1	1462.7
37.5°	1349.1	1357.4	1385.1	1415.6	1423.9
40°	1290.9	1307.5	1335.2	1371.3	1385.1
42.5°	1232.8	1249.4	1282.6	1329.7	1346.3
45°	1171.8	1191.2	1232.8	1285.4	1307.5
47.5°	1110.9	1133.0	1180.1	1241.1	1266.0
50°	1041.6	1069.3	1127.5	1196.7	1224.4
52.5°	975.1	1008.4	1072.1	1149.6	1185.7
55°	905.9	939.1	1022.2	1102.5	1141.3
57.5°	828.3	872.6	964.0	1055.5	1097.0
60°	756.3	797.8	908.6	1008.4	1049.9
62.5°	678.7	734.1	853.2	958.5	1000.1
65°	598.4	659.3	795.1	900.3	941.9
67.5°	526.3	592.8	736.9	842.1	883.7
70°	440.5	523.6	673.2	778.4	820.0
72.5°	360.1	451.5	606.7	709.2	748.0
75°	282.6	385.1	537.4	628.8	648.2
77.5°	210.5	318.6	465.4	504.2	490.3
80°	149.6	254.9	362.9	343.5	351.8
82.5°	97.0	193.9	224.4	254.9	263.2
85°	55.4	113.6	138.5	149.6	155.1
87.5°	24.9	41.6	55.4	55.4	52.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)