

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: P230487

Luminaire Tested: **24CZ-LD5-60-RDP-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230487
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25696)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-60-RDP-UNV-L950-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH RDP LENS
Light Source: (168) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3854.8 lumens
Efficiency: N/A
Efficacy: 73.9 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

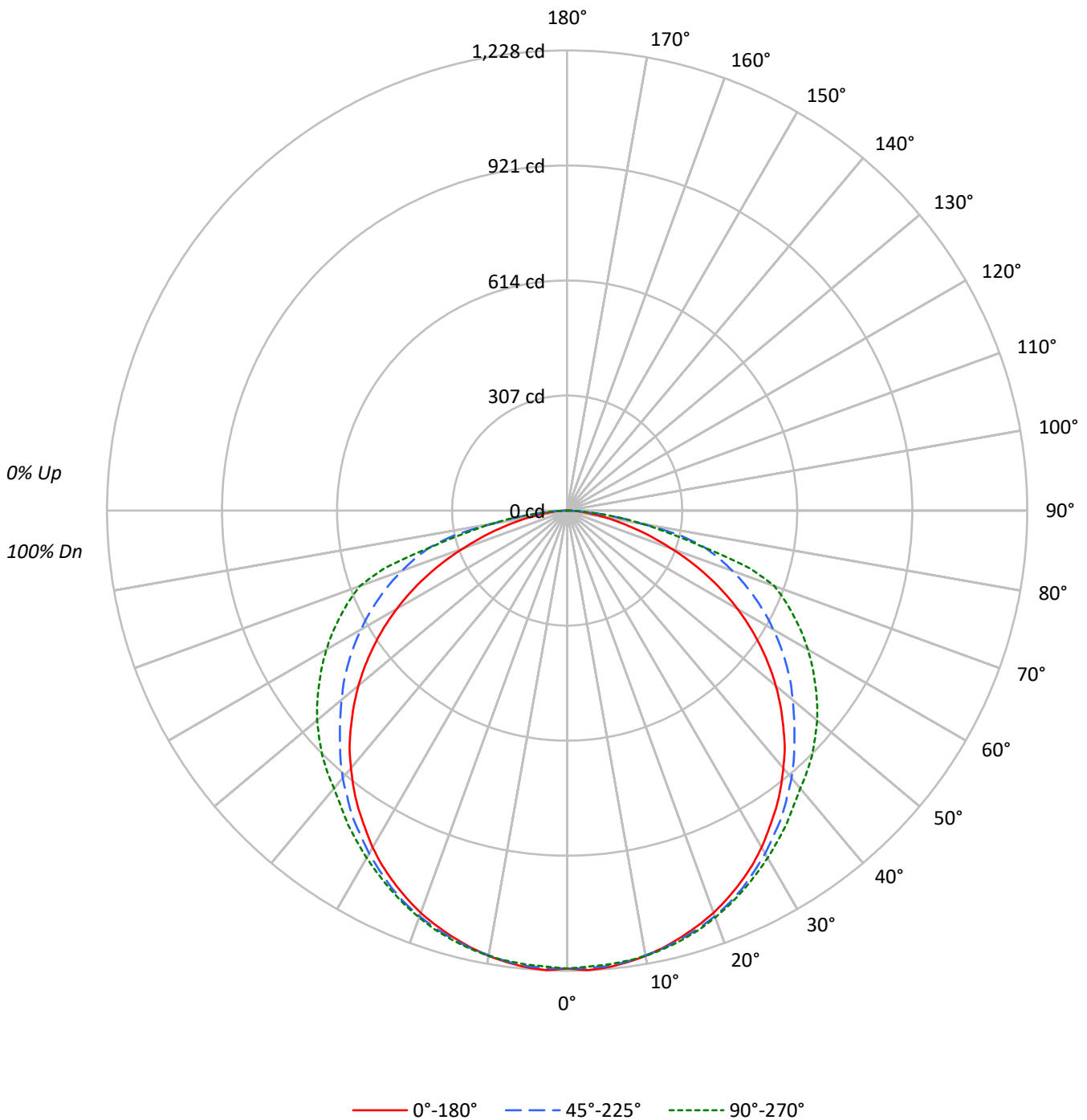
Input Watts (W): 52.17
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	97	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	34	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	27
9	55	41	33	27	53	41	32	27	39	32	27	38	32	27	37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1644	1644	1644
5°	1653	1648	1643
10°	1649	1646	1649
15°	1641	1647	1652
20°	1636	1649	1655
25°	1625	1648	1656
30°	1613	1642	1663
35°	1596	1639	1677
40°	1576	1636	1700
45°	1553	1632	1758
50°	1521	1644	1823
55°	1478	1674	1896
60°	1414	1711	1996
65°	1317	1764	2126
70°	1164	1844	2314
75°	977	1973	1943
80°	779	1558	1617
85°	614	1054	966



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.9	3.0
10°-20°	333.6	8.7
20°-30°	509.5	13.2
30°-40°	622.9	16.2
40°-50°	666.7	17.3
50°-60°	639.5	16.6
60°-70°	540.0	14.0
70°-80°	345.1	9.0
80°-90°	81.6	2.1
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°	959.0	24.9
0°-40°	1581.9	41.0
0°-60°	2888.1	74.9
0°-90°	3854.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3854.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1222	1222	1222	1222	1222	
5°	1224	1216	1220	1218	1216	116
15°	1178	1175	1182	1186	1186	333
25°	1095	1093	1110	1114	1116	505
35°	972	979	998	1011	1021	607
45°	816	829	858	898	924	629
55°	630	651	714	778	808	562
65°	414	454	554	632	668	408
75°	188	268	380	387	374	202
85°	40	66	68	66	63	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1222.0	1222.0	1222.0	1222.0	1222.0
2.5°	1227.7	1220.1	1222.0	1222.0	1218.2
5°	1223.9	1216.3	1220.1	1218.2	1216.3
7.5°	1216.3	1210.6	1214.4	1214.4	1212.5
10°	1206.8	1201.1	1204.9	1206.8	1206.8
12.5°	1193.6	1189.8	1195.5	1195.5	1197.4
15°	1178.4	1174.6	1182.2	1186.0	1186.0
17.5°	1161.3	1159.4	1168.9	1170.8	1172.7
20°	1142.3	1140.4	1151.8	1151.8	1155.6
22.5°	1119.6	1117.7	1132.8	1132.8	1136.6
25°	1094.9	1093.0	1110.1	1113.9	1115.8
27.5°	1068.3	1066.4	1083.5	1089.2	1093.0
30°	1038.0	1038.0	1056.9	1064.5	1070.2
32.5°	1003.8	1009.5	1026.6	1038.0	1045.6
35°	971.5	979.1	998.1	1011.4	1020.9
37.5°	935.5	943.1	964.0	981.0	992.4
40°	897.5	907.0	931.7	950.7	967.8
42.5°	859.6	869.1	895.6	924.1	946.9
45°	815.9	829.2	857.7	897.5	924.1
47.5°	772.3	785.6	821.6	871.0	897.5
50°	726.8	741.9	785.6	842.5	871.0
52.5°	679.3	696.4	751.4	812.2	840.6
55°	630.0	650.9	713.5	778.0	808.4
57.5°	578.8	601.5	675.5	743.8	776.1
60°	525.6	554.1	635.7	707.8	741.9
62.5°	470.6	504.7	595.8	669.8	705.9
65°	413.7	453.5	554.1	631.9	667.9
67.5°	354.8	408.0	512.3	593.9	630.0
70°	296.0	358.6	468.7	552.2	588.2
72.5°	241.0	313.1	425.1	502.9	510.4
75°	187.9	267.6	379.5	387.1	373.8
77.5°	140.4	222.0	313.1	278.9	277.0
80°	100.6	178.4	201.1	206.8	208.7
82.5°	66.4	134.7	130.9	134.7	132.8
85°	39.8	66.4	68.3	66.4	62.6
87.5°	19.0	24.7	19.0	17.1	15.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)