

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: P261088

Luminaire Tested: **24CZ-LD5-70-S-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261088
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-70-S-UNV-L93050-W2A1-U-3500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 90 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6113.2 lumens
Efficiency: N/A
Efficacy: 111.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

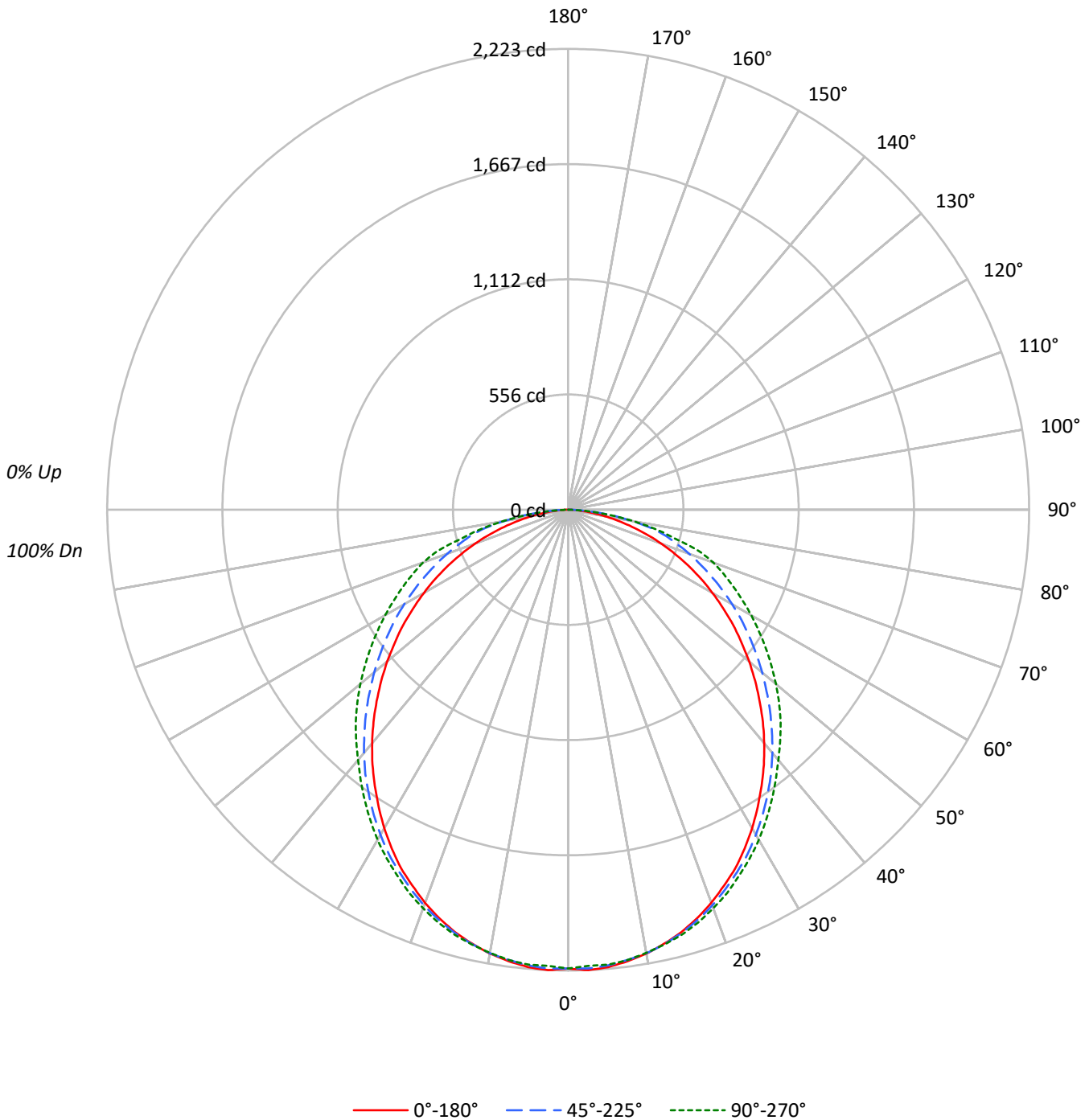
Input Watts (W): 54.680559
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2978	2978	2978
5°	2992	2981	2975
10°	2971	2968	2965
15°	2938	2944	2955
20°	2889	2910	2930
25°	2833	2863	2893
30°	2756	2813	2857
35°	2669	2753	2810
40°	2583	2690	2769
45°	2485	2620	2756
50°	2384	2555	2738
55°	2281	2500	2729
60°	2162	2458	2742
65°	2033	2429	2798
70°	1873	2441	2929
75°	1660	2527	2728
80°	1387	2396	2459
85°	1036	1916	1758



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.2	3.4
10°-20°	595.1	9.7
20°-30°	886.8	14.5
30°-40°	1043.9	17.1
40°-50°	1060.9	17.4
50°-60°	953.8	15.6
60°-70°	753.5	12.3
70°-80°	478.0	7.8
80°-90°	131.9	2.2
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°	1691.1	27.7
0°-40°	2735.1	44.7
0°-60°	4749.7	77.7
0°-90°	6113.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6113.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2213	2213	2213	2213	2213	
5°	2215	2197	2207	2203	2203	210
15°	2109	2099	2113	2120	2122	594
25°	1908	1906	1928	1940	1949	877
35°	1625	1635	1676	1694	1711	1017
45°	1306	1324	1377	1418	1448	1008
55°	972	997	1066	1135	1164	868
65°	639	671	763	846	879	633
75°	319	374	486	529	525	340
85°	67	116	124	114	114	82
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2213.1	2213.1	2213.1	2213.1	2213.1
2.5°	2223.3	2207.0	2215.1	2211.1	2202.9
5°	2215.1	2196.8	2207.0	2202.9	2202.9
7.5°	2196.8	2182.6	2190.7	2188.7	2190.7
10°	2174.4	2160.2	2172.4	2172.4	2170.4
12.5°	2143.9	2131.7	2146.0	2146.0	2148.0
15°	2109.4	2099.2	2113.4	2119.5	2121.6
17.5°	2066.6	2056.5	2074.8	2080.9	2087.0
20°	2017.8	2013.8	2032.1	2038.2	2046.3
22.5°	1962.9	1962.9	1981.2	1989.3	2001.6
25°	1908.0	1905.9	1928.3	1940.5	1948.7
27.5°	1842.9	1844.9	1873.4	1885.6	1895.8
30°	1773.7	1777.8	1810.3	1824.6	1838.8
32.5°	1700.5	1708.6	1745.3	1761.5	1775.8
35°	1625.2	1635.4	1676.1	1694.4	1710.7
37.5°	1550.0	1564.2	1606.9	1625.2	1643.6
40°	1470.7	1482.9	1531.7	1554.0	1576.4
42.5°	1389.3	1405.6	1454.4	1486.9	1513.4
45°	1305.9	1324.2	1377.1	1417.8	1448.3
47.5°	1222.5	1246.9	1297.8	1352.7	1379.1
50°	1139.1	1163.5	1220.5	1281.5	1307.9
52.5°	1053.7	1078.1	1143.2	1206.2	1234.7
55°	972.3	996.7	1065.9	1135.0	1163.5
57.5°	886.9	913.3	990.6	1061.8	1090.3
60°	803.5	829.9	913.3	988.6	1019.1
62.5°	722.1	750.6	838.0	917.4	947.9
65°	638.7	671.3	762.8	846.2	878.7
67.5°	557.3	594.0	689.6	777.0	811.6
70°	476.0	518.7	620.4	709.9	744.5
72.5°	396.6	443.4	551.2	640.7	659.0
75°	319.4	374.3	486.1	528.9	524.8
77.5°	246.1	307.1	412.9	421.1	433.3
80°	179.0	246.1	309.2	325.5	317.3
82.5°	118.0	185.1	221.7	213.6	211.5
85°	67.1	115.9	124.1	113.9	113.9
87.5°	28.5	46.8	40.7	30.5	28.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)