

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: P276253

Luminaire Tested: **24CZ2-70HE-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276253
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-70HE-UNV-L92765-W2A1-U-4500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6044.0 lumens
Efficiency: N/A
Efficacy: 110.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

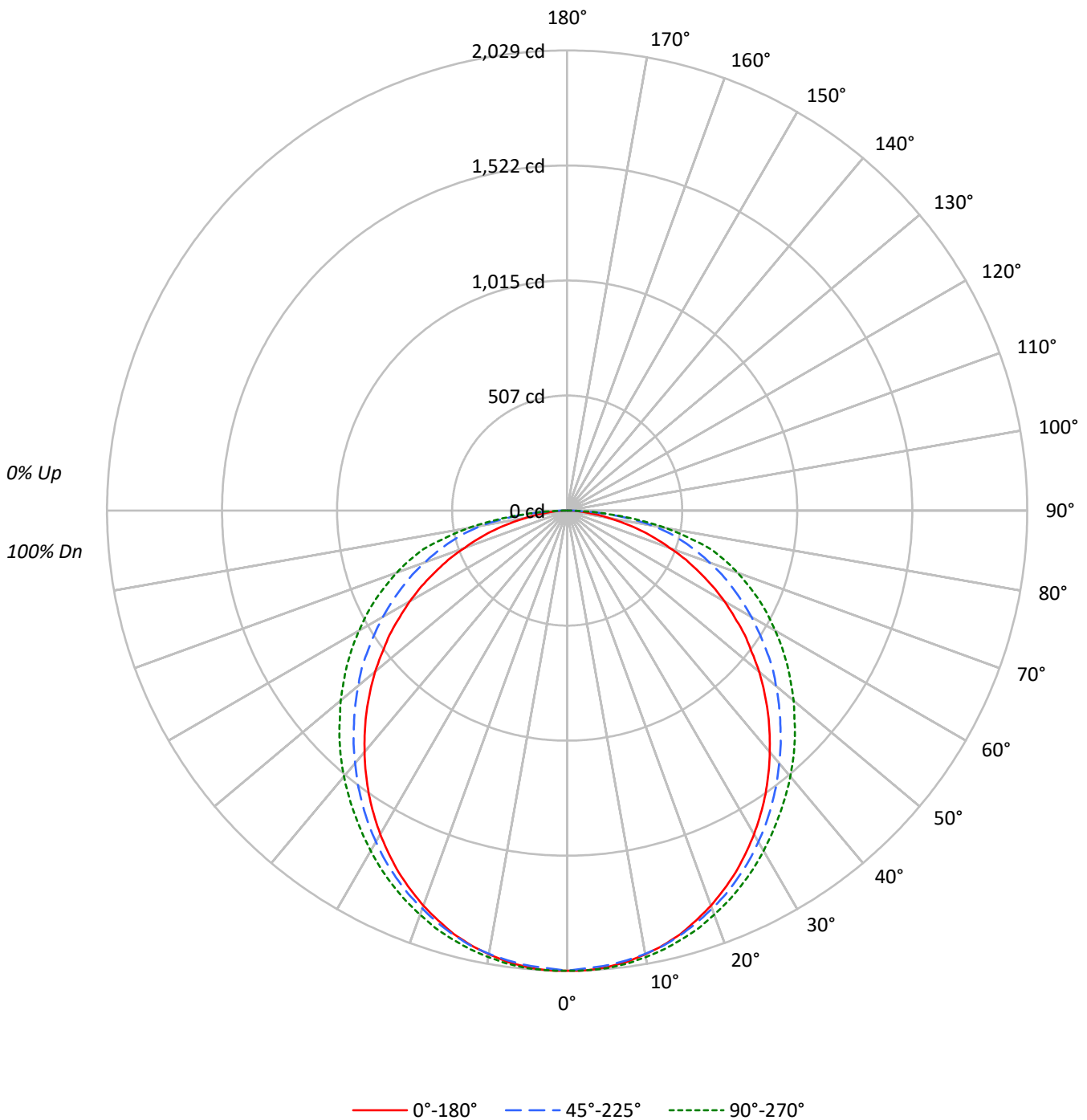
Input Watts (W): 54.684
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	92	96	93	89	92	89	87	89	86	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	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2730	2730	2730
5°	2730	2719	2735
10°	2715	2712	2731
15°	2692	2697	2725
20°	2654	2675	2715
25°	2611	2650	2704
30°	2560	2620	2692
35°	2505	2588	2684
40°	2441	2555	2689
45°	2380	2529	2702
50°	2314	2516	2728
55°	2243	2513	2778
60°	2155	2524	2850
65°	2042	2562	2973
70°	1897	2627	3142
75°	1730	2758	3408
80°	1423	2970	3407
85°	1090	2740	2927



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	191.9	3.2
10°-20°	547.9	9.1
20°-30°	824.5	13.6
30°-40°	988.1	16.3
40°-50°	1029.7	17.0
50°-60°	958.0	15.9
60°-70°	789.0	13.1
70°-80°	537.4	8.9
80°-90°	177.4	2.9
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°	1564.4	25.9
0°-40°	2552.5	42.2
0°-60°	4540.2	75.1
0°-90°	6044.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6044.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2029	2029	2029	2029	2029	
5°	2021	2021	2013	2023	2025	192
15°	1932	1934	1936	1955	1957	544
25°	1759	1767	1785	1815	1822	810
35°	1525	1543	1575	1618	1634	953
45°	1251	1277	1329	1396	1420	965
55°	956	988	1071	1156	1184	852
65°	642	696	805	900	934	637
75°	333	408	530	625	656	351
85°	71	137	178	190	190	88
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2029.2	2029.2	2029.2	2029.2	2029.2
2.5°	2029.2	2029.2	2019.2	2029.2	2029.2
5°	2021.2	2021.2	2013.1	2023.2	2025.2
7.5°	2007.1	2009.1	2001.0	2013.1	2015.1
10°	1986.9	1988.9	1984.9	1997.0	1999.0
12.5°	1962.7	1964.7	1964.7	1978.8	1980.8
15°	1932.4	1934.4	1936.5	1954.6	1956.6
17.5°	1894.1	1900.2	1904.2	1926.4	1930.4
20°	1853.8	1859.8	1867.9	1892.1	1896.1
22.5°	1807.4	1815.4	1829.6	1855.8	1861.8
25°	1759.0	1767.0	1785.2	1815.4	1821.5
27.5°	1704.5	1716.6	1738.8	1771.1	1779.1
30°	1648.0	1660.1	1686.3	1720.6	1732.7
32.5°	1587.5	1603.6	1633.9	1672.2	1684.3
35°	1525.0	1543.1	1575.4	1617.8	1633.9
37.5°	1458.4	1478.6	1516.9	1563.3	1583.5
40°	1389.8	1414.0	1454.4	1508.8	1531.0
42.5°	1321.2	1343.4	1393.8	1452.3	1476.6
45°	1250.6	1276.9	1329.3	1395.9	1420.1
47.5°	1178.0	1204.2	1266.8	1337.4	1359.6
50°	1105.4	1131.6	1202.2	1276.9	1303.1
52.5°	1026.7	1061.0	1141.7	1216.3	1242.6
55°	956.1	988.4	1071.1	1155.8	1184.1
57.5°	875.4	913.8	1004.5	1093.3	1123.6
60°	800.8	841.2	938.0	1028.7	1059.0
62.5°	724.2	768.5	871.4	964.2	998.5
65°	641.5	695.9	804.8	899.6	933.9
67.5°	566.8	623.3	738.3	835.1	865.4
70°	482.1	550.7	667.7	764.5	798.8
72.5°	409.5	478.1	601.1	695.9	730.2
75°	332.8	407.5	530.5	625.3	655.6
77.5°	256.2	338.9	461.9	534.5	544.6
80°	183.6	270.3	383.3	425.6	439.7
82.5°	129.1	207.8	282.4	310.6	318.7
85°	70.6	137.2	177.5	189.6	189.6
87.5°	30.3	58.5	70.6	72.6	74.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)