

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: P276009

Luminaire Tested: **24CZ2-70HE-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276009
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-L93050-W2A1-U-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6123.3 lumens
Efficiency: N/A
Efficacy: 111.2 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

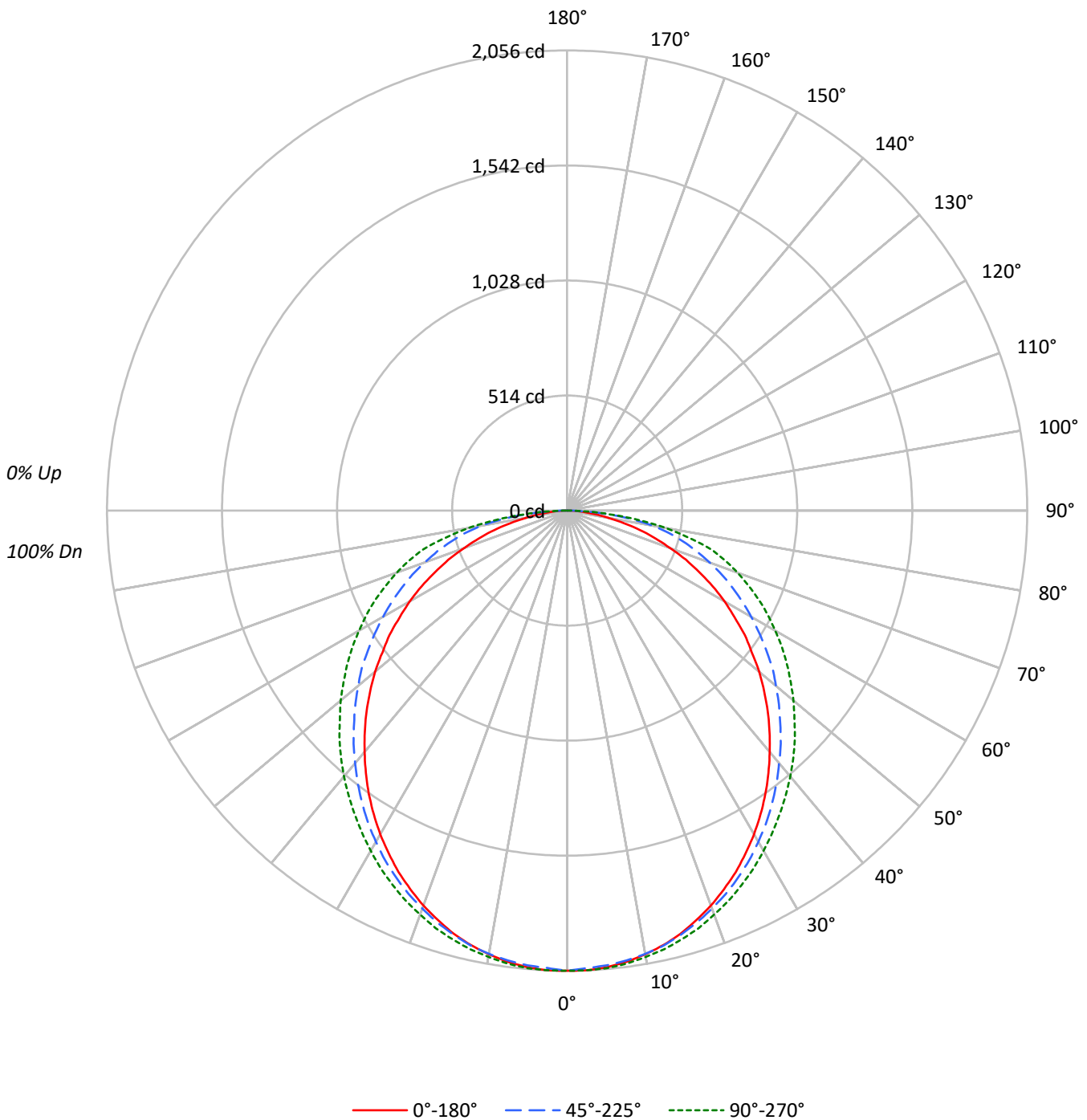
Input Watts (W): 55.056186
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2766	2766	2766
5°	2766	2755	2771
10°	2750	2747	2767
15°	2727	2733	2761
20°	2689	2710	2751
25°	2646	2685	2740
30°	2594	2654	2727
35°	2538	2622	2719
40°	2473	2588	2724
45°	2411	2563	2738
50°	2344	2550	2763
55°	2272	2546	2814
60°	2183	2557	2887
65°	2069	2596	3012
70°	1921	2661	3184
75°	1753	2794	3453
80°	1441	3009	3452
85°	1104	2776	2966



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.4	3.2
10°-20°	555.1	9.1
20°-30°	835.3	13.6
30°-40°	1001.1	16.3
40°-50°	1043.2	17.0
50°-60°	970.6	15.9
60°-70°	799.4	13.1
70°-80°	544.4	8.9
80°-90°	179.7	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°	1584.9	25.9
0°-40°	2585.9	42.2
0°-60°	4599.7	75.1
0°-90°	6123.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6123.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2056	2056	2056	2056	2056	
5°	2048	2048	2040	2050	2052	194
15°	1958	1960	1962	1980	1982	552
25°	1782	1790	1809	1839	1845	820
35°	1545	1563	1596	1639	1655	966
45°	1267	1294	1347	1414	1439	977
55°	969	1001	1085	1171	1200	863
65°	650	705	815	912	946	645
75°	337	413	538	634	664	356
85°	72	139	180	192	192	89
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2055.9	2055.9	2055.9	2055.9	2055.9
2.5°	2055.9	2055.9	2045.7	2055.9	2055.9
5°	2047.7	2047.7	2039.5	2049.7	2051.8
7.5°	2033.4	2035.4	2027.3	2039.5	2041.6
10°	2013.0	2015.0	2010.9	2023.2	2025.2
12.5°	1988.4	1990.5	1990.5	2004.8	2006.8
15°	1957.8	1959.8	1961.9	1980.3	1982.3
17.5°	1918.9	1925.1	1929.2	1951.6	1955.7
20°	1878.1	1884.2	1892.4	1916.9	1921.0
22.5°	1831.1	1839.2	1853.6	1880.1	1886.3
25°	1782.0	1790.2	1808.6	1839.2	1845.4
27.5°	1726.9	1739.1	1761.6	1794.3	1802.5
30°	1669.6	1681.9	1708.5	1743.2	1755.5
32.5°	1608.3	1624.7	1655.3	1694.2	1706.4
35°	1545.0	1563.4	1596.1	1639.0	1655.3
37.5°	1477.5	1498.0	1536.8	1583.8	1604.2
40°	1408.0	1432.6	1473.4	1528.6	1551.1
42.5°	1338.6	1361.0	1412.1	1471.4	1495.9
45°	1267.0	1293.6	1346.7	1414.2	1438.7
47.5°	1193.5	1220.0	1283.4	1354.9	1377.4
50°	1119.9	1146.5	1218.0	1293.6	1320.2
52.5°	1040.2	1074.9	1156.7	1232.3	1258.9
55°	968.7	1001.4	1085.2	1171.0	1199.6
57.5°	886.9	925.8	1017.7	1107.6	1138.3
60°	811.3	852.2	950.3	1042.2	1072.9
62.5°	733.7	778.6	882.8	976.8	1011.6
65°	649.9	705.0	815.4	911.5	946.2
67.5°	574.3	631.5	748.0	846.1	876.7
70°	488.4	557.9	676.4	774.5	809.3
72.5°	414.9	484.3	609.0	705.0	739.8
75°	337.2	412.8	537.5	633.5	664.2
77.5°	259.5	343.3	468.0	541.6	551.8
80°	186.0	273.8	388.3	431.2	445.5
82.5°	130.8	210.5	286.1	314.7	322.9
85°	71.5	139.0	179.8	192.1	192.1
87.5°	30.7	59.3	71.5	73.6	75.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)