

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: P276008

Luminaire Tested: **24CZ2-70HE-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276008
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-3500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5669.7 lumens
Efficiency: N/A
Efficacy: 103.7 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

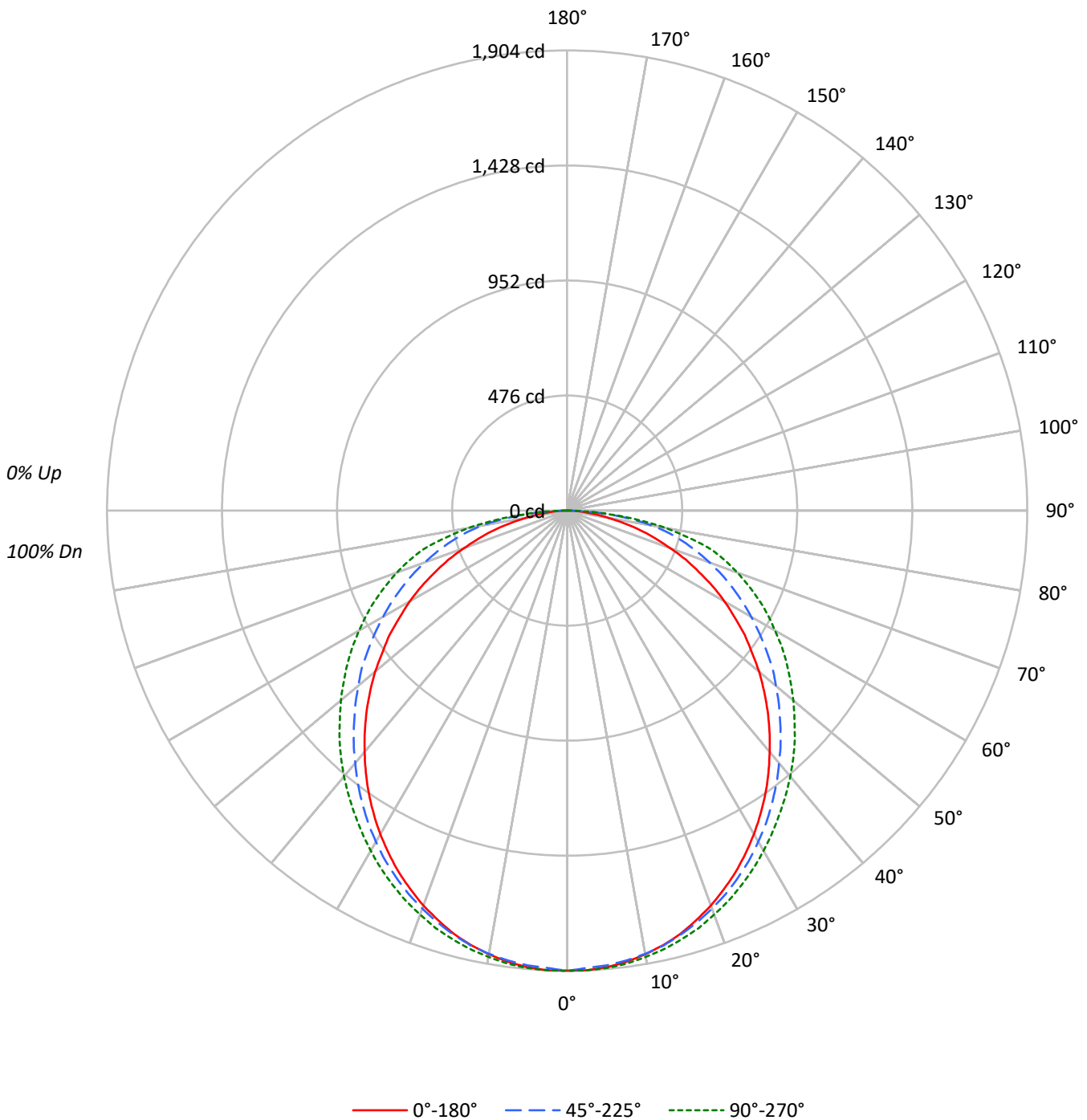
Input Watts (W): 54.680559
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2561	2561	2561
5°	2561	2551	2566
10°	2546	2544	2562
15°	2525	2530	2557
20°	2490	2509	2547
25°	2450	2486	2537
30°	2402	2458	2525
35°	2350	2427	2518
40°	2290	2396	2523
45°	2232	2373	2535
50°	2170	2361	2559
55°	2104	2357	2605
60°	2021	2368	2673
65°	1916	2404	2789
70°	1779	2464	2948
75°	1623	2587	3197
80°	1334	2786	3196
85°	1022	2570	2746



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.0	3.2
10°-20°	514.0	9.1
20°-30°	773.5	13.6
30°-40°	926.9	16.3
40°-50°	965.9	17.0
50°-60°	898.7	15.9
60°-70°	740.2	13.1
70°-80°	504.1	8.9
80°-90°	166.4	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°	1467.5	25.9
0°-40°	2394.4	42.2
0°-60°	4259.0	75.1
0°-90°	5669.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5669.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1904	1904	1904	1904	1904	
5°	1896	1896	1888	1898	1900	180
15°	1813	1815	1816	1834	1836	511
25°	1650	1658	1675	1703	1709	760
35°	1430	1448	1478	1518	1533	894
45°	1173	1198	1247	1309	1332	905
55°	897	927	1005	1084	1111	799
65°	602	653	755	844	876	597
75°	312	382	498	587	615	329
85°	66	129	166	178	178	82
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1903.6	1903.6	1903.6	1903.6	1903.6
2.5°	1903.6	1903.6	1894.1	1903.6	1903.6
5°	1896.0	1896.0	1888.4	1897.9	1899.8
7.5°	1882.8	1884.7	1877.1	1888.4	1890.3
10°	1863.8	1865.7	1862.0	1873.3	1875.2
12.5°	1841.1	1843.0	1843.0	1856.3	1858.2
15°	1812.8	1814.7	1816.5	1833.6	1835.5
17.5°	1776.8	1782.5	1786.3	1807.1	1810.9
20°	1739.0	1744.6	1752.2	1774.9	1778.7
22.5°	1695.4	1703.0	1716.3	1740.9	1746.5
25°	1650.0	1657.6	1674.6	1703.0	1708.7
27.5°	1598.9	1610.3	1631.1	1661.4	1668.9
30°	1546.0	1557.3	1581.9	1614.1	1625.4
32.5°	1489.2	1504.3	1532.7	1568.7	1580.0
35°	1430.5	1447.6	1477.8	1517.6	1532.7
37.5°	1368.1	1387.0	1423.0	1466.5	1485.4
40°	1303.7	1326.5	1364.3	1415.4	1436.2
42.5°	1239.4	1260.2	1307.5	1362.4	1385.1
45°	1173.2	1197.8	1247.0	1309.4	1332.1
47.5°	1105.1	1129.7	1188.3	1254.5	1275.4
50°	1036.9	1061.5	1127.8	1197.8	1222.4
52.5°	963.1	995.3	1071.0	1141.0	1165.6
55°	896.9	927.2	1004.8	1084.2	1110.7
57.5°	821.2	857.2	942.3	1025.6	1054.0
60°	751.2	789.1	879.9	965.0	993.4
62.5°	679.3	720.9	817.4	904.5	936.7
65°	601.7	652.8	755.0	843.9	876.1
67.5°	531.7	584.7	692.6	783.4	811.8
70°	452.2	516.6	626.3	717.2	749.3
72.5°	384.1	448.5	563.9	652.8	685.0
75°	312.2	382.2	497.7	586.6	615.0
77.5°	240.3	317.9	433.3	501.4	510.9
80°	172.2	253.6	359.5	399.3	412.5
82.5°	121.1	194.9	264.9	291.4	299.0
85°	66.2	128.7	166.5	177.9	177.9
87.5°	28.4	54.9	66.2	68.1	70.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)