

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: P260667

Luminaire Tested: **24CZ-LD5-70-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260667
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-70-UNV-L93050-W2A1-U-3000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED AT 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5485.7 lumens
Efficiency: N/A
Efficacy: 99.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

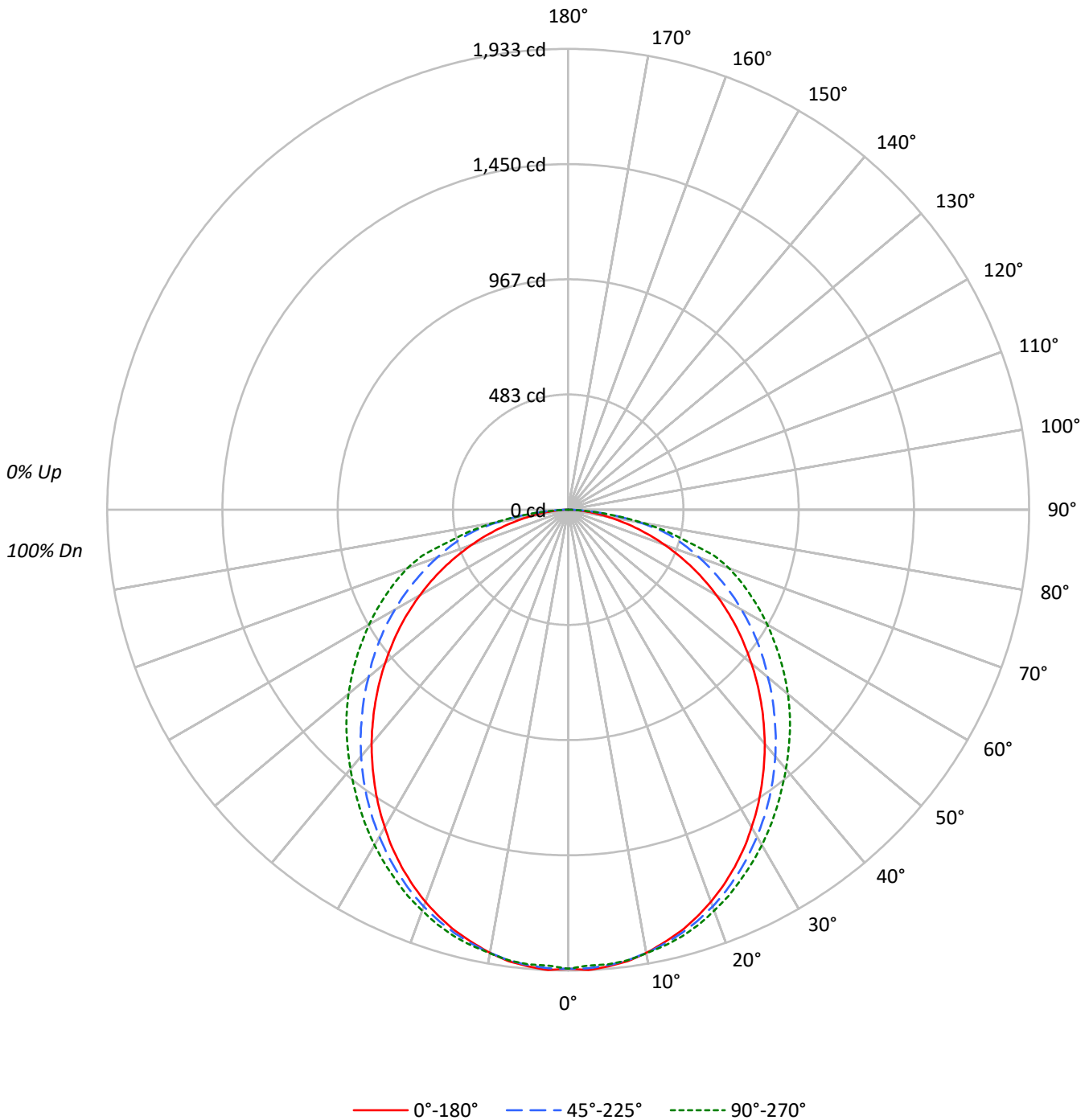
Input Watts (W): 54.895203
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2590	2590	2590
5°	2598	2590	2585
10°	2579	2579	2582
15°	2548	2561	2580
20°	2506	2536	2563
25°	2454	2501	2543
30°	2390	2460	2524
35°	2323	2419	2505
40°	2253	2372	2494
45°	2176	2327	2502
50°	2099	2288	2516
55°	2022	2274	2542
60°	1931	2259	2593
65°	1830	2260	2679
70°	1692	2298	2823
75°	1513	2402	2685
80°	1266	2300	2459
85°	957	1769	1681



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.9	3.3
10°-20°	517.8	9.4
20°-30°	774.1	14.1
30°-40°	918.3	16.7
40°-50°	945.1	17.2
50°-60°	867.0	15.8
60°-70°	701.0	12.8
70°-80°	455.0	8.3
80°-90°	125.4	2.3
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°	1473.8	26.9
0°-40°	2392.0	43.6
0°-60°	4204.2	76.6
0°-90°	5485.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5485.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1925	1925	1925	1925	1925	
5°	1923	1910	1918	1916	1914	182
15°	1829	1822	1839	1846	1852	515
25°	1653	1655	1685	1700	1713	761
35°	1414	1426	1472	1504	1525	884
45°	1144	1163	1223	1281	1315	883
55°	862	888	969	1048	1084	770
65°	575	608	710	804	841	568
75°	291	346	462	516	516	309
85°	62	105	115	111	109	76
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1925.2	1925.2	1925.2	1925.2	1925.2
2.5°	1932.7	1917.7	1925.2	1923.3	1913.9
5°	1923.3	1910.2	1917.7	1915.8	1913.9
7.5°	1910.2	1897.0	1906.4	1904.5	1906.4
10°	1887.6	1876.4	1887.6	1889.5	1889.5
12.5°	1859.4	1850.1	1865.1	1868.8	1872.6
15°	1829.4	1821.9	1838.8	1846.3	1851.9
17.5°	1791.8	1786.2	1806.9	1816.3	1823.8
20°	1750.5	1748.6	1771.2	1780.6	1790.0
22.5°	1703.6	1703.6	1729.9	1741.1	1754.3
25°	1652.8	1654.7	1684.8	1699.8	1712.9
27.5°	1598.4	1600.3	1635.9	1654.7	1669.7
30°	1538.3	1545.8	1583.3	1607.8	1624.7
32.5°	1478.2	1487.6	1528.9	1557.1	1575.8
35°	1414.3	1425.6	1472.5	1504.5	1525.1
37.5°	1348.6	1361.7	1412.4	1448.1	1472.5
40°	1282.8	1297.9	1350.4	1391.8	1419.9
42.5°	1213.3	1230.2	1288.5	1337.3	1367.4
45°	1143.8	1162.6	1222.7	1281.0	1314.8
47.5°	1074.3	1096.9	1160.7	1224.6	1260.3
50°	1003.0	1025.5	1093.1	1166.4	1202.1
52.5°	931.6	957.9	1033.0	1108.2	1143.8
55°	862.1	888.4	969.2	1048.1	1083.7
57.5°	790.7	817.0	905.3	988.0	1023.6
60°	717.5	747.5	839.6	924.1	963.5
62.5°	646.1	678.0	775.7	865.9	903.4
65°	574.7	608.5	710.0	803.9	841.4
67.5°	501.5	540.9	646.1	741.9	781.3
70°	430.1	473.3	584.1	679.9	717.5
72.5°	360.6	407.6	522.1	619.8	642.4
75°	291.1	345.6	462.0	516.5	516.5
77.5°	225.4	285.5	394.4	415.1	426.4
80°	163.4	229.1	296.8	321.2	317.4
82.5°	108.9	174.7	212.2	212.2	206.6
85°	62.0	105.2	114.6	110.8	108.9
87.5°	26.3	39.4	35.7	28.2	24.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)