

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: P260615

Luminaire Tested: **24CZ-LD5-40SE-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260615
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-LD5-40SE-UNV-L83050-W2A1-U-4500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED AT 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4291.0 lumens
Efficiency: N/A
Efficacy: 134.5 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

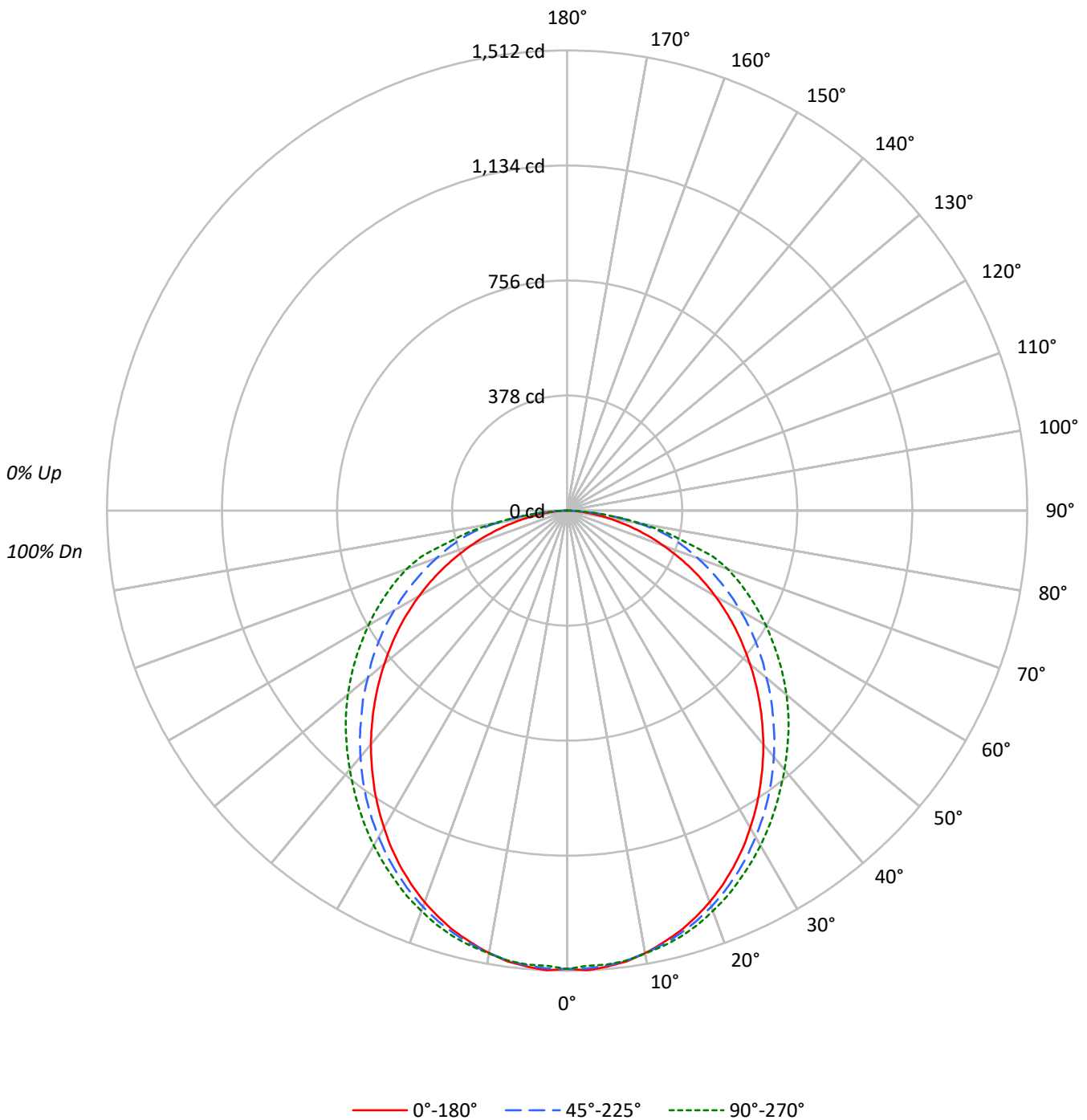
Input Watts (W): 31.901139
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2026	2026	2026
5°	2032	2026	2022
10°	2017	2017	2019
15°	1993	2003	2018
20°	1961	1984	2005
25°	1919	1957	1989
30°	1869	1924	1974
35°	1817	1892	1960
40°	1763	1855	1951
45°	1702	1820	1957
50°	1642	1790	1968
55°	1582	1778	1989
60°	1510	1767	2028
65°	1431	1768	2096
70°	1323	1797	2208
75°	1184	1879	2100
80°	990	1798	1924
85°	749	1383	1315



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.3	3.3
10°-20°	405.0	9.4
20°-30°	605.5	14.1
30°-40°	718.3	16.7
40°-50°	739.3	17.2
50°-60°	678.2	15.8
60°-70°	548.4	12.8
70°-80°	355.9	8.3
80°-90°	98.1	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°	1152.8	26.9
0°-40°	1871.1	43.6
0°-60°	3288.6	76.6
0°-90°	4291.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4291.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1506	1506	1506	1506	1506	
5°	1504	1494	1500	1499	1497	143
15°	1431	1425	1438	1444	1449	403
25°	1293	1294	1318	1330	1340	595
35°	1106	1115	1152	1177	1193	692
45°	895	909	956	1002	1028	690
55°	674	695	758	820	848	602
65°	450	476	555	629	658	444
75°	228	270	361	404	404	242
85°	48	82	90	87	85	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1505.9	1505.9	1505.9	1505.9	1505.9
2.5°	1511.8	1500.0	1505.9	1504.4	1497.1
5°	1504.4	1494.2	1500.0	1498.6	1497.1
7.5°	1494.2	1483.9	1491.2	1489.8	1491.2
10°	1476.5	1467.7	1476.5	1478.0	1478.0
12.5°	1454.5	1447.2	1458.9	1461.8	1464.8
15°	1431.0	1425.1	1438.3	1444.2	1448.6
17.5°	1401.6	1397.2	1413.4	1420.7	1426.6
20°	1369.3	1367.8	1385.4	1392.8	1400.1
22.5°	1332.6	1332.6	1353.1	1361.9	1372.2
25°	1292.9	1294.4	1317.9	1329.6	1339.9
27.5°	1250.3	1251.7	1279.7	1294.4	1306.1
30°	1203.3	1209.1	1238.5	1257.6	1270.8
32.5°	1156.3	1163.6	1195.9	1218.0	1232.6
35°	1106.3	1115.1	1151.8	1176.8	1193.0
37.5°	1054.9	1065.2	1104.8	1132.7	1151.8
40°	1003.5	1015.2	1056.3	1088.7	1110.7
42.5°	949.1	962.3	1007.9	1046.1	1069.6
45°	894.7	909.4	956.4	1002.0	1028.4
47.5°	840.4	858.0	908.0	957.9	985.8
50°	784.5	802.2	855.1	912.4	940.3
52.5°	728.7	749.3	808.1	866.8	894.7
55°	674.4	694.9	758.1	819.8	847.7
57.5°	618.5	639.1	708.1	772.8	800.7
60°	561.2	584.7	656.7	722.8	753.7
62.5°	505.4	530.4	606.8	677.3	706.7
65°	449.6	476.0	555.4	628.8	658.2
67.5°	392.3	423.1	505.4	580.3	611.2
70°	336.4	370.2	456.9	531.8	561.2
72.5°	282.1	318.8	408.4	484.8	502.5
75°	227.7	270.3	361.4	404.0	404.0
77.5°	176.3	223.3	308.5	324.7	333.5
80°	127.8	179.2	232.1	251.2	248.3
82.5°	85.2	136.6	166.0	166.0	161.6
85°	48.5	82.3	89.6	86.7	85.2
87.5°	20.6	30.9	27.9	22.0	19.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)