

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: P261234

Luminaire Tested: **24CZ-LD5-40SE-S-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261234
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-40SE-S-UNV-L82765-W2A1-U-4500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED AT 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4194.0 lumens
Efficiency: N/A
Efficacy: 135.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

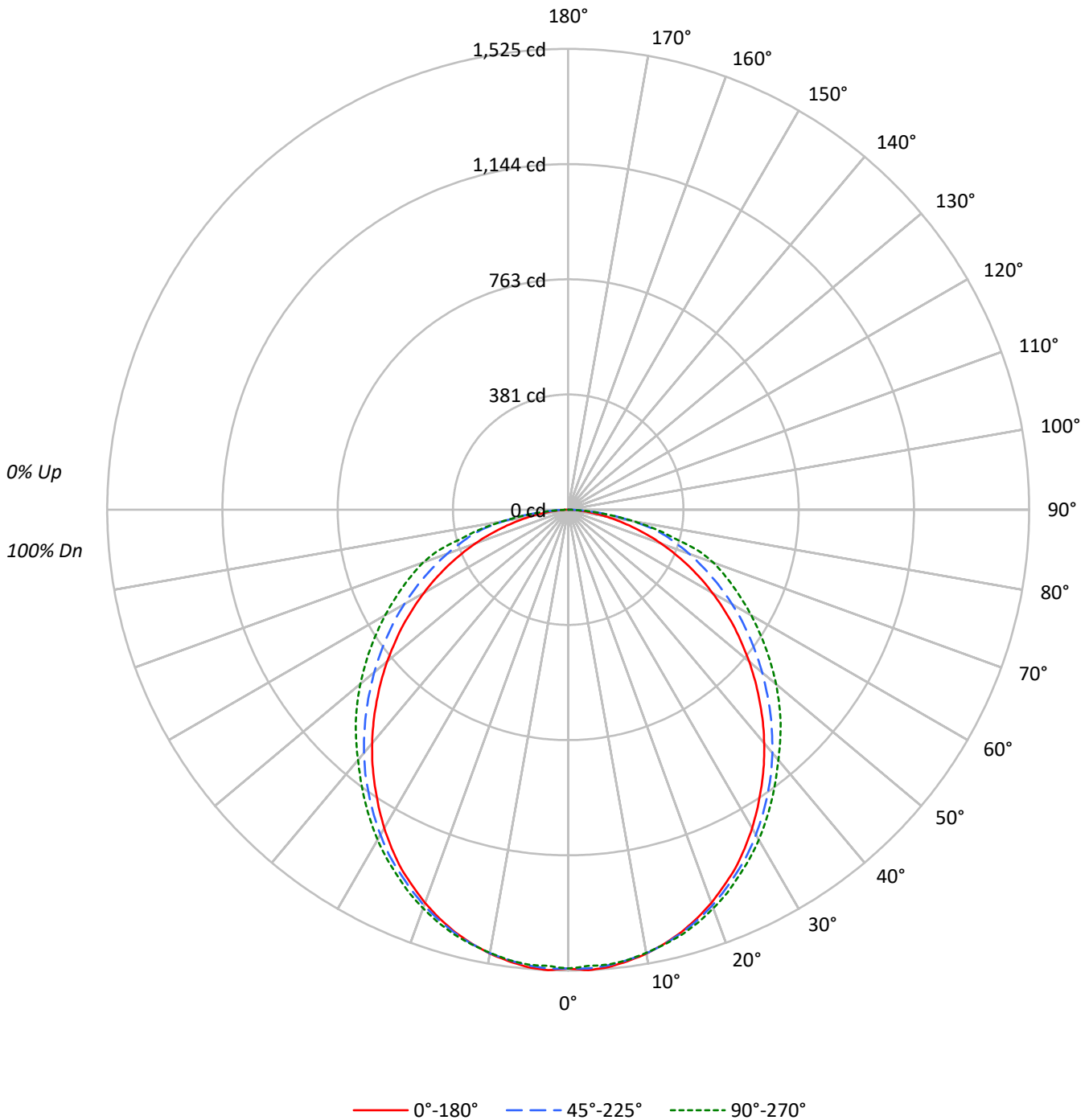
Input Watts (W): 30.969
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2043	2043	2043
5°	2053	2045	2041
10°	2038	2036	2034
15°	2016	2020	2027
20°	1982	1996	2010
25°	1943	1964	1985
30°	1891	1930	1960
35°	1831	1889	1928
40°	1772	1846	1900
45°	1705	1798	1891
50°	1636	1753	1878
55°	1565	1715	1872
60°	1483	1686	1881
65°	1395	1666	1919
70°	1284	1674	2009
75°	1139	1734	1871
80°	951	1643	1687
85°	712	1314	1206



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.6	3.4
10°-20°	408.3	9.7
20°-30°	608.4	14.5
30°-40°	716.2	17.1
40°-50°	727.8	17.4
50°-60°	654.4	15.6
60°-70°	516.9	12.3
70°-80°	328.0	7.8
80°-90°	90.5	2.2
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°	1160.2	27.7
0°-40°	1876.4	44.7
0°-60°	3258.6	77.7
0°-90°	4194.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4194.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1518	1518	1518	1518	1518	
5°	1520	1507	1514	1511	1511	144
15°	1447	1440	1450	1454	1456	408
25°	1309	1308	1323	1331	1337	602
35°	1115	1122	1150	1162	1174	698
45°	896	908	945	973	994	691
55°	667	684	731	779	798	596
65°	438	460	523	580	603	434
75°	219	257	334	363	360	233
85°	46	80	85	78	78	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1518.3	1518.3	1518.3	1518.3	1518.3
2.5°	1525.3	1514.1	1519.7	1516.9	1511.3
5°	1519.7	1507.1	1514.1	1511.3	1511.3
7.5°	1507.1	1497.4	1503.0	1501.6	1503.0
10°	1491.8	1482.0	1490.4	1490.4	1489.0
12.5°	1470.9	1462.5	1472.3	1472.3	1473.6
15°	1447.1	1440.2	1449.9	1454.1	1455.5
17.5°	1417.8	1410.9	1423.4	1427.6	1431.8
20°	1384.3	1381.5	1394.1	1398.3	1403.9
22.5°	1346.7	1346.7	1359.2	1364.8	1373.2
25°	1309.0	1307.6	1322.9	1331.3	1336.9
27.5°	1264.3	1265.7	1285.3	1293.6	1300.6
30°	1216.9	1219.7	1242.0	1251.8	1261.5
32.5°	1166.6	1172.2	1197.3	1208.5	1218.3
35°	1115.0	1122.0	1149.9	1162.5	1173.6
37.5°	1063.4	1073.1	1102.4	1115.0	1127.6
40°	1008.9	1017.3	1050.8	1066.2	1081.5
42.5°	953.1	964.3	997.8	1020.1	1038.3
45°	895.9	908.5	944.8	972.7	993.6
47.5°	838.7	855.4	890.3	928.0	946.1
50°	781.5	798.2	837.3	879.2	897.3
52.5°	722.9	739.6	784.3	827.5	847.1
55°	667.0	683.8	731.2	778.7	798.2
57.5°	608.4	626.6	679.6	728.5	748.0
60°	551.2	569.4	626.6	678.2	699.1
62.5°	495.4	514.9	574.9	629.4	650.3
65°	438.2	460.5	523.3	580.5	602.9
67.5°	382.4	407.5	473.1	533.1	556.8
70°	326.5	355.9	425.6	487.0	510.8
72.5°	272.1	304.2	378.2	439.6	452.1
75°	219.1	256.8	333.5	362.8	360.0
77.5°	168.9	210.7	283.3	288.9	297.2
80°	122.8	168.9	212.1	223.3	217.7
82.5°	80.9	127.0	152.1	146.5	145.1
85°	46.1	79.5	85.1	78.1	78.1
87.5°	19.5	32.1	27.9	20.9	19.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)