

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: P261144

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261144
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-LD5-40-S-UNV-L82765-W2A1-U-4500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED AT 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4221.0 lumens
Efficiency: N/A
Efficacy: 146.4 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

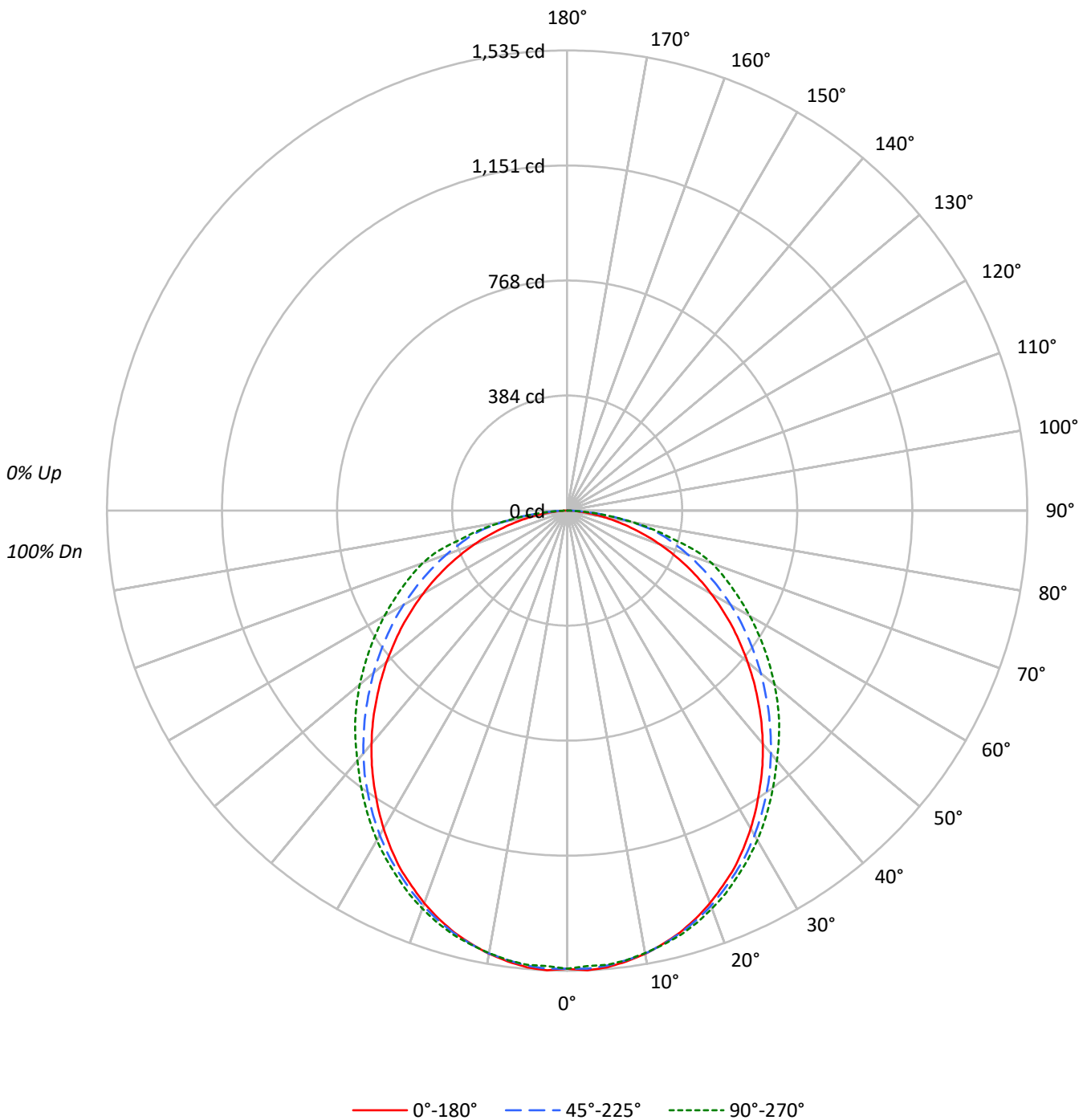
Input Watts (W): 28.83
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2056	2056	2056
5°	2066	2058	2054
10°	2051	2049	2047
15°	2029	2033	2041
20°	1995	2009	2023
25°	1956	1977	1998
30°	1903	1942	1973
35°	1843	1901	1940
40°	1783	1858	1912
45°	1716	1809	1903
50°	1646	1764	1890
55°	1575	1727	1885
60°	1493	1697	1893
65°	1404	1677	1932
70°	1293	1685	2022
75°	1146	1745	1884
80°	958	1654	1698
85°	715	1323	1215



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.5	3.4
10°-20°	410.9	9.7
20°-30°	612.3	14.5
30°-40°	720.8	17.1
40°-50°	732.5	17.4
50°-60°	658.6	15.6
60°-70°	520.3	12.3
70°-80°	330.1	7.8
80°-90°	91.1	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°	1167.7	27.7
0°-40°	1888.5	44.7
0°-60°	3279.6	77.7
0°-90°	4221.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4221.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1528	1528	1528	1528	1528	
5°	1530	1517	1524	1521	1521	145
15°	1456	1449	1459	1464	1465	410
25°	1317	1316	1332	1340	1346	606
35°	1122	1129	1157	1170	1181	702
45°	902	914	951	979	1000	696
55°	671	688	736	784	803	600
65°	441	464	527	584	607	437
75°	220	258	336	365	362	235
85°	46	80	86	79	79	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1528.1	1528.1	1528.1	1528.1	1528.1
2.5°	1535.1	1523.9	1529.5	1526.7	1521.1
5°	1529.5	1516.8	1523.9	1521.1	1521.1
7.5°	1516.8	1507.0	1512.6	1511.2	1512.6
10°	1501.4	1491.6	1500.0	1500.0	1498.6
12.5°	1480.3	1471.9	1481.7	1481.7	1483.1
15°	1456.5	1449.4	1459.3	1463.5	1464.9
17.5°	1427.0	1419.9	1432.6	1436.8	1441.0
20°	1393.2	1390.4	1403.1	1407.3	1412.9
22.5°	1355.3	1355.3	1368.0	1373.6	1382.0
25°	1317.4	1316.0	1331.5	1339.9	1345.5
27.5°	1272.5	1273.9	1293.5	1302.0	1309.0
30°	1224.7	1227.5	1250.0	1259.8	1269.7
32.5°	1174.1	1179.8	1205.0	1216.3	1226.1
35°	1122.2	1129.2	1157.3	1169.9	1181.2
37.5°	1070.2	1080.0	1109.5	1122.2	1134.8
40°	1015.4	1023.9	1057.6	1073.0	1088.5
42.5°	959.3	970.5	1004.2	1026.7	1044.9
45°	901.7	914.3	950.8	978.9	1000.0
47.5°	844.1	860.9	896.1	934.0	952.2
50°	786.5	803.4	842.7	884.8	903.1
52.5°	727.5	744.4	789.3	832.9	852.5
55°	671.3	688.2	736.0	783.7	803.4
57.5°	612.4	630.6	684.0	733.1	752.8
60°	554.8	573.0	630.6	682.6	703.6
62.5°	498.6	518.3	578.6	633.4	654.5
65°	441.0	463.5	526.7	584.3	606.7
67.5°	384.8	410.1	476.1	536.5	560.4
70°	328.6	358.1	428.4	490.2	514.0
72.5°	273.9	306.2	380.6	442.4	455.1
75°	220.5	258.4	335.7	365.2	362.4
77.5°	169.9	212.1	285.1	290.7	299.2
80°	123.6	169.9	213.5	224.7	219.1
82.5°	81.5	127.8	153.1	147.5	146.1
85°	46.3	80.1	85.7	78.7	78.7
87.5°	19.7	32.3	28.1	21.1	19.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)