

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: P261110

Luminaire Tested: **24CZ-LD5-40SE-S-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261110
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-L93050-W2A1-U-4500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED AT 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3856.5 lumens
Efficiency: N/A
Efficacy: 121.7 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

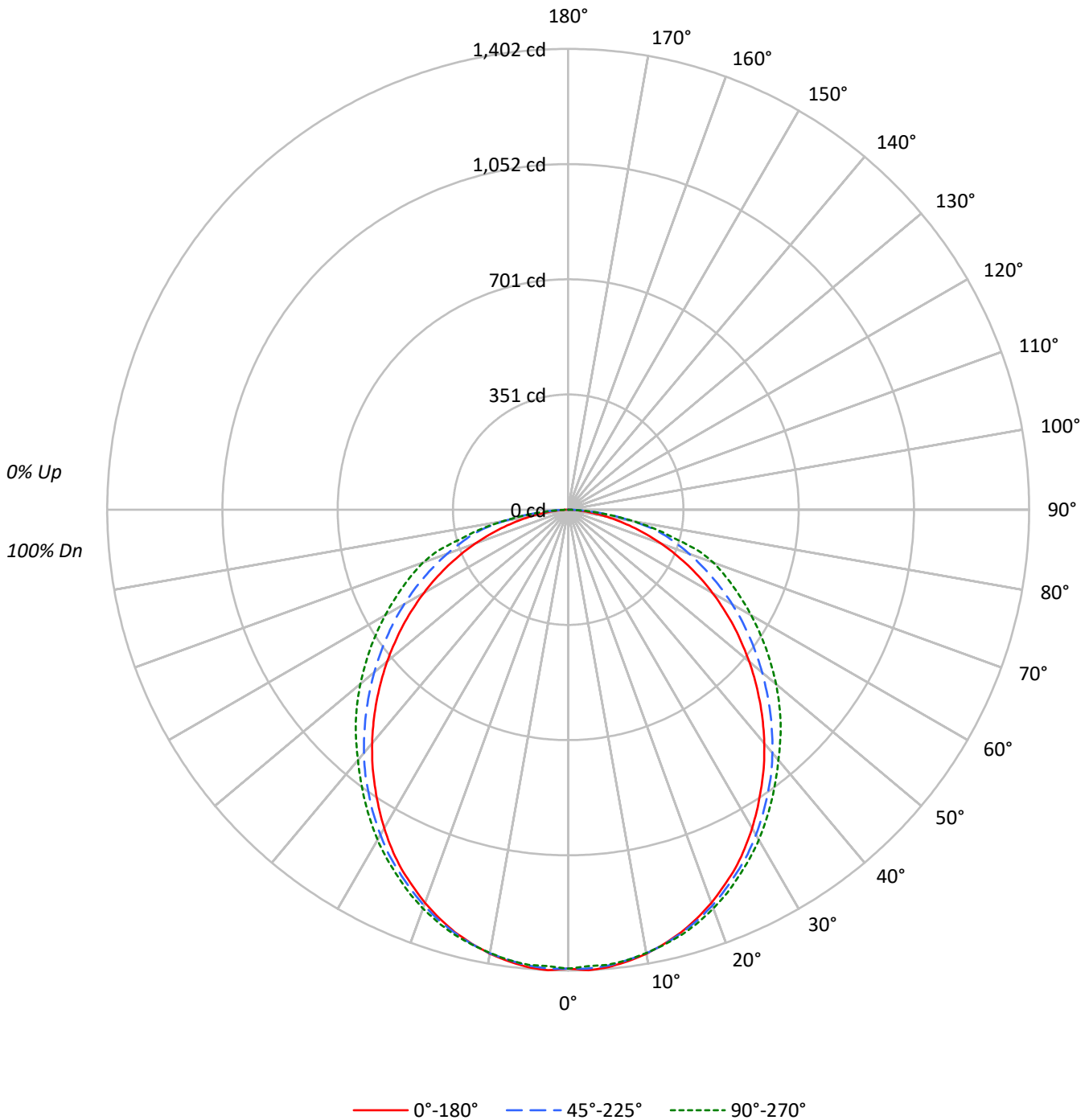
Input Watts (W): 31.688262
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1878	1878	1878
5°	1887	1880	1877
10°	1874	1872	1871
15°	1854	1857	1864
20°	1823	1835	1848
25°	1787	1806	1825
30°	1738	1774	1802
35°	1684	1737	1773
40°	1629	1697	1747
45°	1568	1653	1738
50°	1504	1612	1727
55°	1439	1577	1722
60°	1364	1551	1730
65°	1283	1532	1765
70°	1181	1540	1847
75°	1048	1594	1721
80°	875	1511	1551
85°	653	1209	1110



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.0	3.4
10°-20°	375.4	9.7
20°-30°	559.4	14.5
30°-40°	658.6	17.1
40°-50°	669.2	17.4
50°-60°	601.7	15.6
60°-70°	475.3	12.3
70°-80°	301.6	7.8
80°-90°	83.2	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°	1066.8	27.7
0°-40°	1725.4	44.7
0°-60°	2996.3	77.7
0°-90°	3856.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3856.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1396	1396	1396	1396	1396	
5°	1397	1386	1392	1390	1390	132
15°	1331	1324	1333	1337	1338	375
25°	1204	1202	1216	1224	1229	553
35°	1025	1032	1057	1069	1079	641
45°	824	835	869	894	914	636
55°	613	629	672	716	734	548
65°	403	424	481	534	554	399
75°	202	236	307	334	331	214
85°	42	73	78	72	72	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1396.1	1396.1	1396.1	1396.1	1396.1
2.5°	1402.5	1392.3	1397.4	1394.8	1389.7
5°	1397.4	1385.8	1392.3	1389.7	1389.7
7.5°	1385.8	1376.9	1382.0	1380.7	1382.0
10°	1371.7	1362.7	1370.4	1370.4	1369.2
12.5°	1352.5	1344.8	1353.8	1353.8	1355.0
15°	1330.7	1324.2	1333.2	1337.1	1338.4
17.5°	1303.7	1297.3	1308.8	1312.7	1316.5
20°	1272.9	1270.4	1281.9	1285.8	1290.9
22.5°	1238.3	1238.3	1249.8	1255.0	1262.7
25°	1203.6	1202.3	1216.5	1224.2	1229.3
27.5°	1162.6	1163.8	1181.8	1189.5	1195.9
30°	1118.9	1121.5	1142.0	1151.0	1160.0
32.5°	1072.7	1077.9	1101.0	1111.2	1120.2
35°	1025.3	1031.7	1057.3	1068.9	1079.2
37.5°	977.8	986.8	1013.7	1025.3	1036.8
40°	927.7	935.4	966.2	980.4	994.5
42.5°	876.4	886.7	917.5	938.0	954.7
45°	823.8	835.4	868.7	894.4	913.6
47.5°	771.2	786.6	818.7	853.3	870.0
50°	718.6	734.0	769.9	808.4	825.1
52.5°	664.7	680.1	721.2	760.9	778.9
55°	613.4	628.8	672.4	716.0	734.0
57.5°	559.5	576.2	624.9	669.8	687.8
60°	506.9	523.5	576.2	623.6	642.9
62.5°	455.5	473.5	528.7	578.7	598.0
65°	402.9	423.5	481.2	533.8	554.3
67.5°	351.6	374.7	435.0	490.2	512.0
70°	300.3	327.2	391.4	447.8	469.6
72.5°	250.2	279.7	347.7	404.2	415.8
75°	201.5	236.1	306.7	333.6	331.1
77.5°	155.3	193.8	260.5	265.6	273.3
80°	112.9	155.3	195.0	205.3	200.2
82.5°	74.4	116.8	139.9	134.7	133.5
85°	42.3	73.1	78.3	71.9	71.9
87.5°	18.0	29.5	25.7	19.2	18.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)