

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: P261378

Luminaire Tested: **24CZ-LD5-45SE-S-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261378
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-LD5-45SE-S-UNV-L92765-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: 4188.0 lumens
Efficiency: N/A
Efficacy: 117.6 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

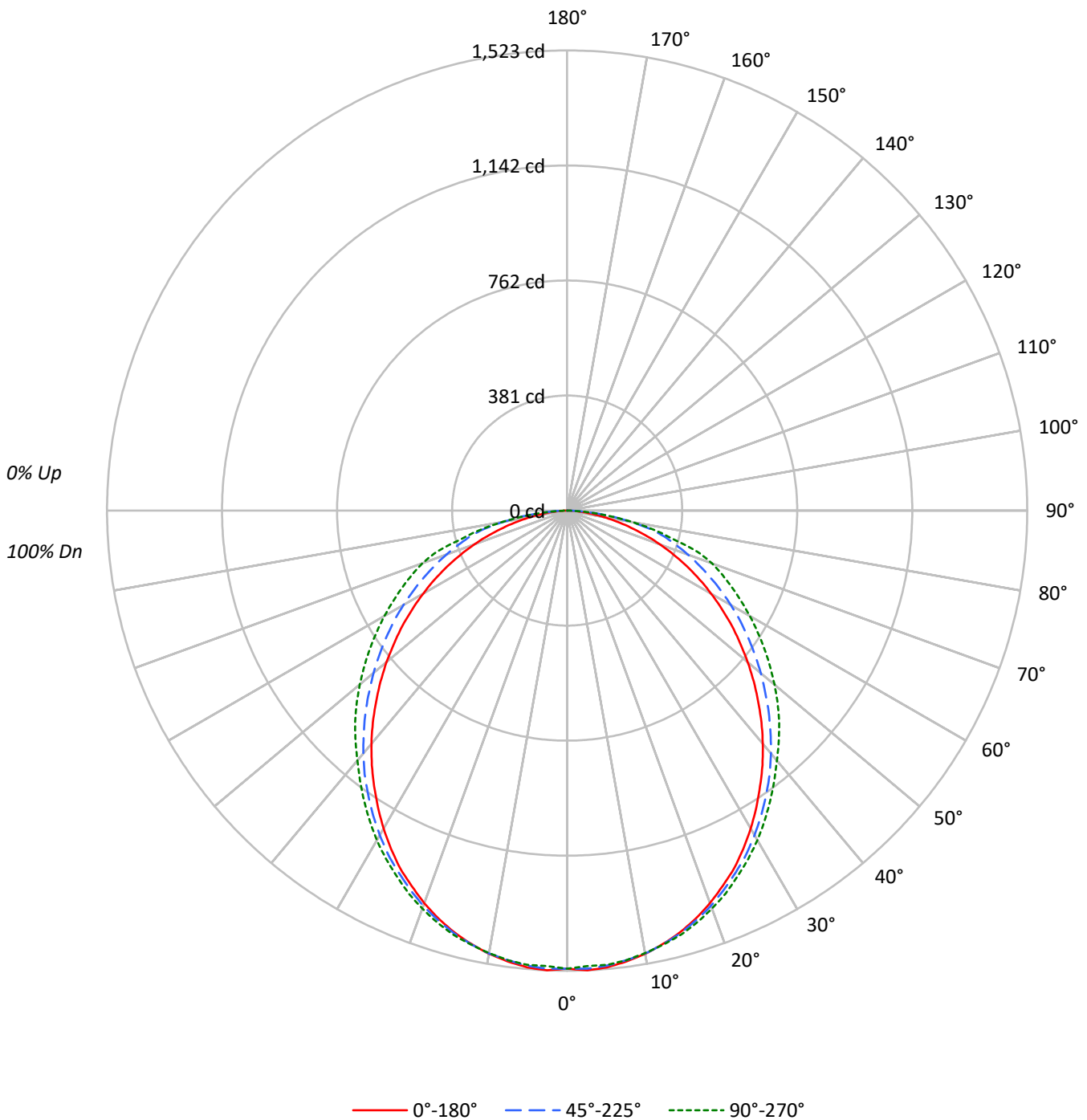
Input Watts (W): 35.619
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2040	2040	2040
5°	2050	2042	2038
10°	2035	2033	2031
15°	2013	2017	2025
20°	1979	1993	2007
25°	1940	1961	1982
30°	1888	1927	1957
35°	1829	1886	1925
40°	1770	1843	1897
45°	1702	1795	1888
50°	1634	1750	1876
55°	1563	1713	1870
60°	1481	1684	1879
65°	1393	1664	1917
70°	1283	1672	2006
75°	1137	1731	1869
80°	950	1641	1684
85°	710	1312	1204



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.3	3.4
10°-20°	407.7	9.7
20°-30°	607.5	14.5
30°-40°	715.2	17.1
40°-50°	726.8	17.4
50°-60°	653.4	15.6
60°-70°	516.2	12.3
70°-80°	327.5	7.8
80°-90°	90.4	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°	1158.6	27.7
0°-40°	1873.7	44.7
0°-60°	3253.9	77.7
0°-90°	4188.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4188.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1516	1516	1516	1516	1516	
5°	1518	1505	1512	1509	1509	144
15°	1445	1438	1448	1452	1453	407
25°	1307	1306	1321	1329	1335	601
35°	1113	1120	1148	1161	1172	697
45°	895	907	943	971	992	690
55°	666	683	730	778	797	595
65°	438	460	523	580	602	433
75°	219	256	333	362	360	233
85°	46	79	85	78	78	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1516.1	1516.1	1516.1	1516.1	1516.1
2.5°	1523.1	1512.0	1517.5	1514.7	1509.2
5°	1517.5	1505.0	1512.0	1509.2	1509.2
7.5°	1505.0	1495.2	1500.8	1499.4	1500.8
10°	1489.7	1479.9	1488.3	1488.3	1486.9
12.5°	1468.8	1460.4	1470.1	1470.1	1471.5
15°	1445.1	1438.1	1447.9	1452.0	1453.4
17.5°	1415.8	1408.8	1421.4	1425.6	1429.7
20°	1382.4	1379.6	1392.1	1396.3	1401.9
22.5°	1344.7	1344.7	1357.3	1362.8	1371.2
25°	1307.1	1305.7	1321.0	1329.4	1335.0
27.5°	1262.5	1263.9	1283.4	1291.8	1298.7
30°	1215.1	1217.9	1240.2	1250.0	1259.7
32.5°	1165.0	1170.5	1195.6	1206.8	1216.5
35°	1113.4	1120.4	1148.2	1160.8	1171.9
37.5°	1061.9	1071.6	1100.9	1113.4	1126.0
40°	1007.5	1015.9	1049.3	1064.6	1080.0
42.5°	951.8	962.9	996.4	1018.7	1036.8
45°	894.6	907.2	943.4	971.3	992.2
47.5°	837.5	854.2	889.1	926.7	944.8
50°	780.4	797.1	836.1	877.9	896.0
52.5°	721.8	738.6	783.1	826.3	845.9
55°	666.1	682.8	730.2	777.6	797.1
57.5°	607.6	625.7	678.6	727.4	746.9
60°	550.4	568.5	625.7	677.2	698.1
62.5°	494.7	514.2	574.1	628.5	649.4
65°	437.6	459.9	522.6	579.7	602.0
67.5°	381.8	406.9	472.4	532.3	556.0
70°	326.1	355.3	425.0	486.3	510.0
72.5°	271.7	303.8	377.6	439.0	451.5
75°	218.8	256.4	333.0	362.3	359.5
77.5°	168.6	210.4	282.9	288.5	296.8
80°	122.6	168.6	211.8	223.0	217.4
82.5°	80.8	126.8	151.9	146.3	144.9
85°	46.0	79.4	85.0	78.0	78.0
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)