

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: P261104

Luminaire Tested: **24CZ-LD5-35SE-S-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261104
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-LD5-35SE-S-UNV-L93050-W2A1-U-4000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3330.6 lumens
Efficiency: N/A
Efficacy: 124.7 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

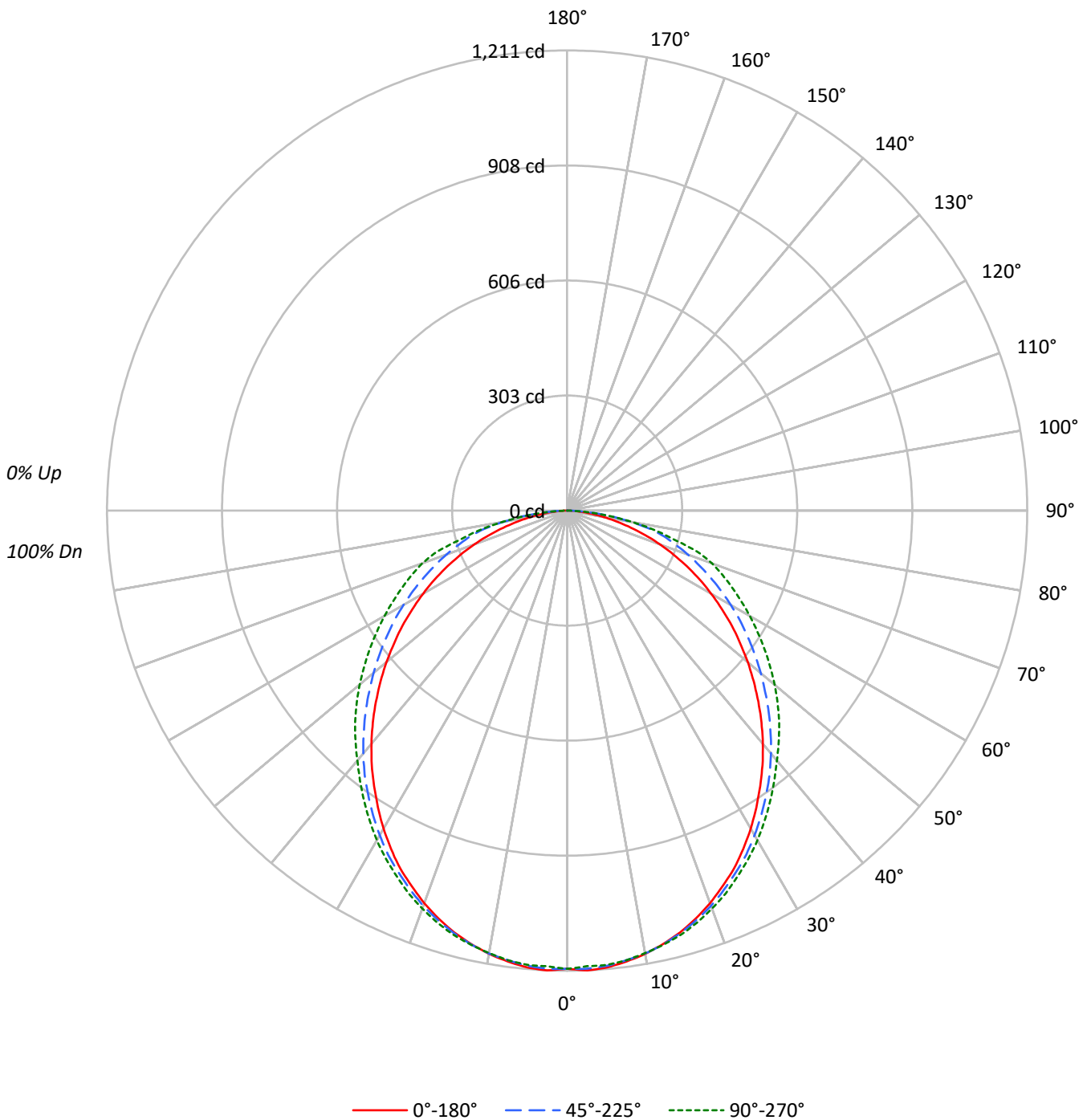
Input Watts (W): 26.71704
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1622	1622	1622
5°	1630	1624	1621
10°	1619	1617	1616
15°	1601	1604	1610
20°	1574	1585	1596
25°	1543	1560	1576
30°	1501	1532	1556
35°	1454	1500	1531
40°	1407	1466	1509
45°	1354	1428	1502
50°	1299	1392	1492
55°	1243	1362	1487
60°	1178	1339	1494
65°	1108	1323	1524
70°	1020	1330	1596
75°	905	1377	1486
80°	755	1306	1340
85°	565	1044	959



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.0	3.4
10°-20°	324.2	9.7
20°-30°	483.2	14.5
30°-40°	568.8	17.1
40°-50°	578.0	17.4
50°-60°	519.7	15.6
60°-70°	410.5	12.3
70°-80°	260.4	7.8
80°-90°	71.9	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°	921.4	27.7
0°-40°	1490.1	44.7
0°-60°	2587.8	77.7
0°-90°	3330.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3330.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1206	1206	1206	1206	1206	
5°	1207	1197	1202	1200	1200	114
15°	1149	1144	1151	1155	1156	324
25°	1040	1038	1051	1057	1062	478
35°	886	891	913	923	932	554
45°	712	722	750	772	789	549
55°	530	543	581	618	634	473
65°	348	366	416	461	479	345
75°	174	204	265	288	286	185
85°	37	63	68	62	62	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1205.8	1205.8	1205.8	1205.8	1205.8
2.5°	1211.3	1202.4	1206.9	1204.6	1200.2
5°	1206.9	1196.9	1202.4	1200.2	1200.2
7.5°	1196.9	1189.1	1193.6	1192.5	1193.6
10°	1184.7	1176.9	1183.6	1183.6	1182.5
12.5°	1168.1	1161.4	1169.2	1169.2	1170.3
15°	1149.2	1143.7	1151.4	1154.8	1155.9
17.5°	1126.0	1120.4	1130.4	1133.7	1137.0
20°	1099.4	1097.1	1107.1	1110.4	1114.9
22.5°	1069.4	1069.4	1079.4	1083.8	1090.5
25°	1039.5	1038.4	1050.6	1057.2	1061.7
27.5°	1004.1	1005.2	1020.7	1027.3	1032.9
30°	966.4	968.6	986.3	994.1	1001.8
32.5°	926.5	930.9	950.9	959.7	967.5
35°	885.5	891.0	913.2	923.2	932.0
37.5°	844.5	852.2	875.5	885.5	895.4
40°	801.2	807.9	834.5	846.7	858.9
42.5°	756.9	765.8	792.4	810.1	824.5
45°	711.5	721.5	750.3	772.4	789.1
47.5°	666.0	679.3	707.0	737.0	751.4
50°	620.6	633.9	664.9	698.2	712.6
52.5°	574.1	587.4	622.8	657.2	672.7
55°	529.7	543.0	580.7	618.4	633.9
57.5°	483.2	497.6	539.7	578.5	594.0
60°	437.7	452.2	497.6	538.6	555.2
62.5°	393.4	408.9	456.6	499.8	516.4
65°	348.0	365.7	415.6	461.0	478.8
67.5°	303.7	323.6	375.7	423.3	442.2
70°	259.3	282.6	338.0	386.8	405.6
72.5°	216.1	241.6	300.3	349.1	359.1
75°	174.0	203.9	264.9	288.1	285.9
77.5°	134.1	167.3	225.0	229.4	236.1
80°	97.5	134.1	168.5	177.3	172.9
82.5°	64.3	100.8	120.8	116.4	115.3
85°	36.6	63.2	67.6	62.1	62.1
87.5°	15.5	25.5	22.2	16.6	15.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)