

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: P261107

Luminaire Tested: **24CZ-LD5-40SE-S-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261107
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-3000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED AT 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3212.3 lumens
Efficiency: N/A
Efficacy: 103.3 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

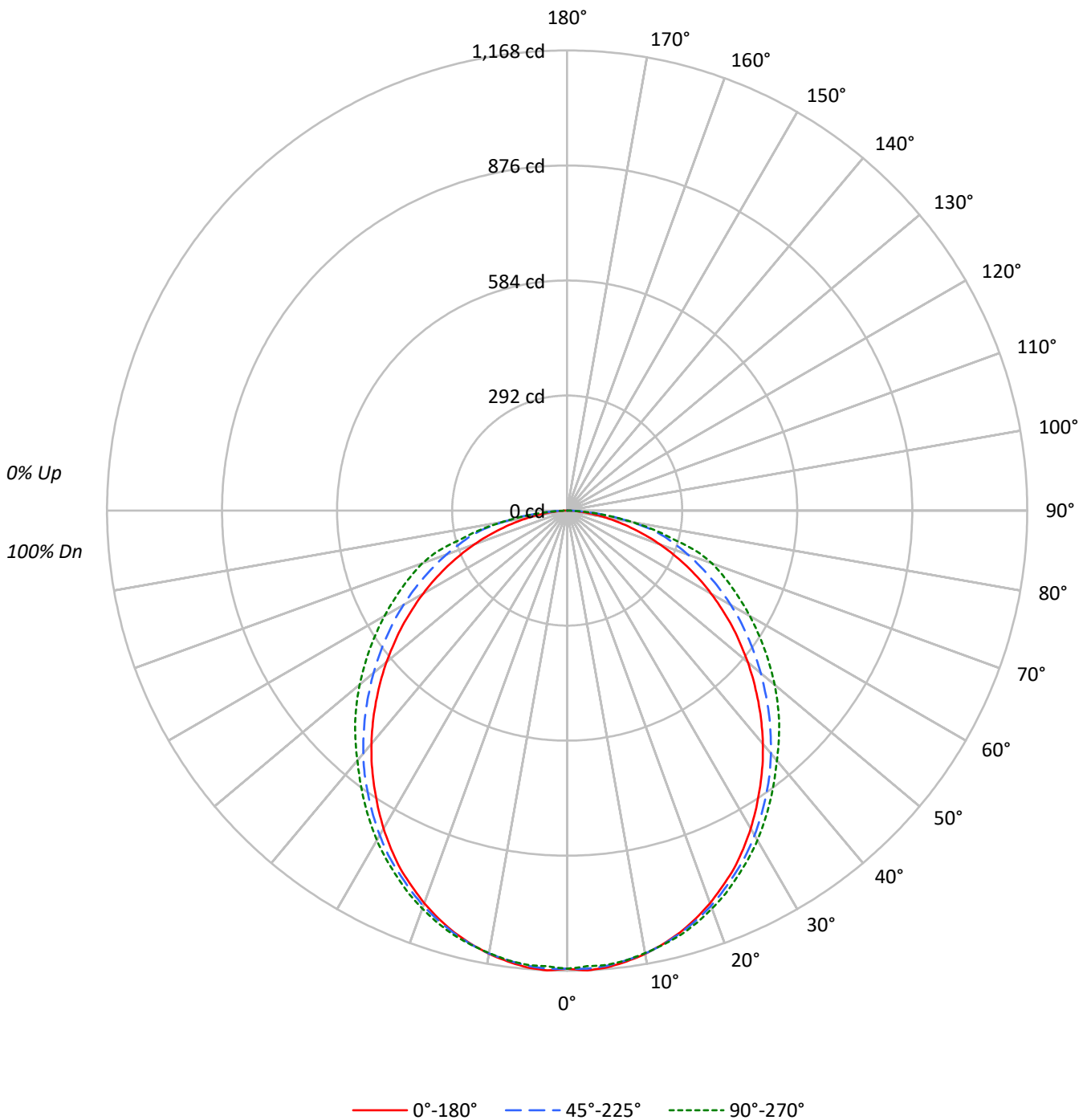
Input Watts (W): 31.110453
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1565	1565	1565
5°	1572	1566	1563
10°	1561	1560	1558
15°	1544	1547	1553
20°	1518	1529	1540
25°	1488	1504	1520
30°	1448	1478	1501
35°	1403	1447	1476
40°	1357	1414	1455
45°	1306	1377	1448
50°	1253	1342	1439
55°	1198	1314	1434
60°	1136	1291	1441
65°	1068	1276	1470
70°	984	1282	1539
75°	872	1328	1434
80°	729	1259	1292
85°	545	1007	925



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.0	3.4
10°-20°	312.7	9.7
20°-30°	466.0	14.5
30°-40°	548.6	17.1
40°-50°	557.4	17.4
50°-60°	501.2	15.6
60°-70°	395.9	12.3
70°-80°	251.2	7.8
80°-90°	69.3	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°	888.7	27.7
0°-40°	1437.2	44.7
0°-60°	2495.8	77.7
0°-90°	3212.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3212.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1163	1163	1163	1163	1163	
5°	1164	1154	1160	1158	1158	110
15°	1108	1103	1110	1114	1115	312
25°	1003	1002	1013	1020	1024	461
35°	854	859	881	890	899	534
45°	686	696	724	745	761	529
55°	511	524	560	596	611	456
65°	336	353	401	445	462	332
75°	168	197	256	278	276	179
85°	35	61	65	60	60	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1162.9	1162.9	1162.9	1162.9	1162.9
2.5°	1168.3	1159.7	1164.0	1161.9	1157.6
5°	1164.0	1154.4	1159.7	1157.6	1157.6
7.5°	1154.4	1146.9	1151.2	1150.1	1151.2
10°	1142.6	1135.1	1141.5	1141.5	1140.5
12.5°	1126.6	1120.2	1127.7	1127.7	1128.7
15°	1108.4	1103.1	1110.5	1113.8	1114.8
17.5°	1086.0	1080.6	1090.2	1093.4	1096.7
20°	1060.3	1058.2	1067.8	1071.0	1075.3
22.5°	1031.5	1031.5	1041.1	1045.3	1051.8
25°	1002.6	1001.5	1013.3	1019.7	1024.0
27.5°	968.4	969.5	984.4	990.8	996.2
30°	932.0	934.2	951.3	958.8	966.3
32.5°	893.6	897.8	917.1	925.6	933.1
35°	854.0	859.4	880.7	890.4	898.9
37.5°	814.5	822.0	844.4	854.0	863.6
40°	772.8	779.2	804.9	816.6	828.4
42.5°	730.0	738.6	764.2	781.3	795.2
45°	686.2	695.8	723.6	745.0	761.0
47.5°	642.4	655.2	681.9	710.8	724.7
50°	598.6	611.4	641.3	673.4	687.3
52.5°	553.7	566.5	600.7	633.8	648.8
55°	510.9	523.7	560.1	596.4	611.4
57.5°	466.0	479.9	520.5	557.9	572.9
60°	422.2	436.1	479.9	519.5	535.5
62.5°	379.4	394.4	440.4	482.1	498.1
65°	335.6	352.7	400.8	444.6	461.7
67.5°	292.9	312.1	362.3	408.3	426.5
70°	250.1	272.6	326.0	373.0	391.2
72.5°	208.4	233.0	289.7	336.7	346.3
75°	167.8	196.7	255.5	277.9	275.8
77.5°	129.3	161.4	217.0	221.3	227.7
80°	94.1	129.3	162.5	171.0	166.7
82.5°	62.0	97.3	116.5	112.2	111.2
85°	35.3	60.9	65.2	59.9	59.9
87.5°	15.0	24.6	21.4	16.0	15.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)