

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: P260688

Luminaire Tested: **24CZ-LD5-40SE-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260688
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-40SE-UNV-L93050-W2A1-U-3500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 90 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3440.8 lumens
Efficiency: N/A
Efficacy: 111.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

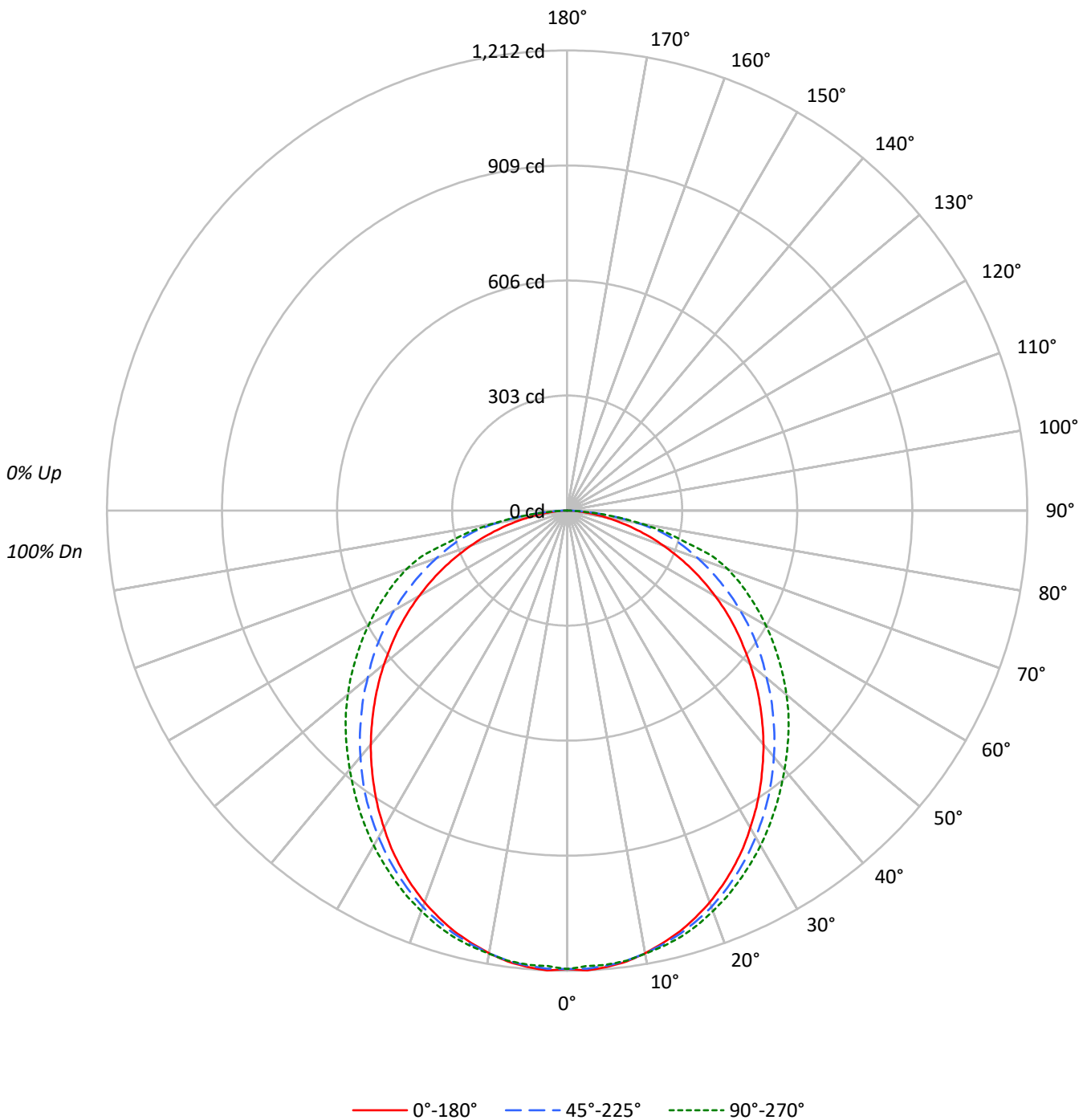
Input Watts (W): 30.988809
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1625	1625	1625
5°	1629	1625	1621
10°	1618	1618	1619
15°	1598	1606	1618
20°	1572	1591	1608
25°	1539	1569	1595
30°	1499	1543	1583
35°	1457	1517	1571
40°	1413	1488	1564
45°	1365	1459	1569
50°	1317	1435	1578
55°	1268	1426	1595
60°	1211	1417	1626
65°	1148	1418	1680
70°	1061	1441	1770
75°	949	1507	1684
80°	794	1442	1543
85°	601	1110	1054



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.1	3.3
10°-20°	324.8	9.4
20°-30°	485.5	14.1
30°-40°	576.0	16.7
40°-50°	592.8	17.2
50°-60°	543.8	15.8
60°-70°	439.7	12.8
70°-80°	285.4	8.3
80°-90°	78.7	2.3
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°	924.4	26.9
0°-40°	1500.3	43.6
0°-60°	2637.0	76.6
0°-90°	3440.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3440.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1208	1208	1208	1208	1208	
5°	1206	1198	1203	1202	1200	114
15°	1148	1143	1153	1158	1162	323
25°	1037	1038	1057	1066	1074	477
35°	887	894	924	944	957	555
45°	718	729	767	804	825	554
55°	541	557	608	657	680	483
65°	360	382	445	504	528	356
75°	183	217	290	324	324	194
85°	39	66	72	70	68	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1207.5	1207.5	1207.5	1207.5	1207.5
2.5°	1212.3	1202.8	1207.5	1206.4	1200.5
5°	1206.4	1198.1	1202.8	1201.7	1200.5
7.5°	1198.1	1189.9	1195.8	1194.6	1195.8
10°	1184.0	1176.9	1184.0	1185.2	1185.2
12.5°	1166.3	1160.4	1169.8	1172.2	1174.6
15°	1147.5	1142.7	1153.3	1158.1	1161.6
17.5°	1123.9	1120.4	1133.3	1139.2	1143.9
20°	1098.0	1096.8	1110.9	1116.8	1122.7
22.5°	1068.5	1068.5	1085.0	1092.1	1100.3
25°	1036.7	1037.9	1056.7	1066.2	1074.4
27.5°	1002.6	1003.7	1026.1	1037.9	1047.3
30°	964.9	969.6	993.1	1008.4	1019.0
32.5°	927.2	933.0	959.0	976.6	988.4
35°	887.1	894.2	923.6	943.6	956.6
37.5°	845.9	854.1	885.9	908.3	923.6
40°	804.6	814.1	847.0	873.0	890.6
42.5°	761.0	771.6	808.2	838.8	857.6
45°	717.5	729.2	766.9	803.5	824.7
47.5°	673.9	688.0	728.1	768.1	790.5
50°	629.1	643.2	685.6	731.6	754.0
52.5°	584.3	600.8	647.9	695.1	717.5
55°	540.7	557.2	607.9	657.4	679.8
57.5°	496.0	512.5	567.8	619.7	642.1
60°	450.0	468.9	526.6	579.6	604.4
62.5°	405.3	425.3	486.6	543.1	566.7
65°	360.5	381.7	445.3	504.2	527.8
67.5°	314.5	339.3	405.3	465.3	490.1
70°	269.8	296.9	366.4	426.5	450.0
72.5°	226.2	255.6	327.5	388.8	402.9
75°	182.6	216.8	289.8	324.0	324.0
77.5°	141.4	179.1	247.4	260.4	267.4
80°	102.5	143.7	186.1	201.5	199.1
82.5°	68.3	109.6	133.1	133.1	129.6
85°	38.9	66.0	71.9	69.5	68.3
87.5°	16.5	24.7	22.4	17.7	15.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)