

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: P260637

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260637
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-LD5-40-UNV-L93050-W2A1-U-3000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED AT 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3168.8 lumens
Efficiency: N/A
Efficacy: 109.6 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

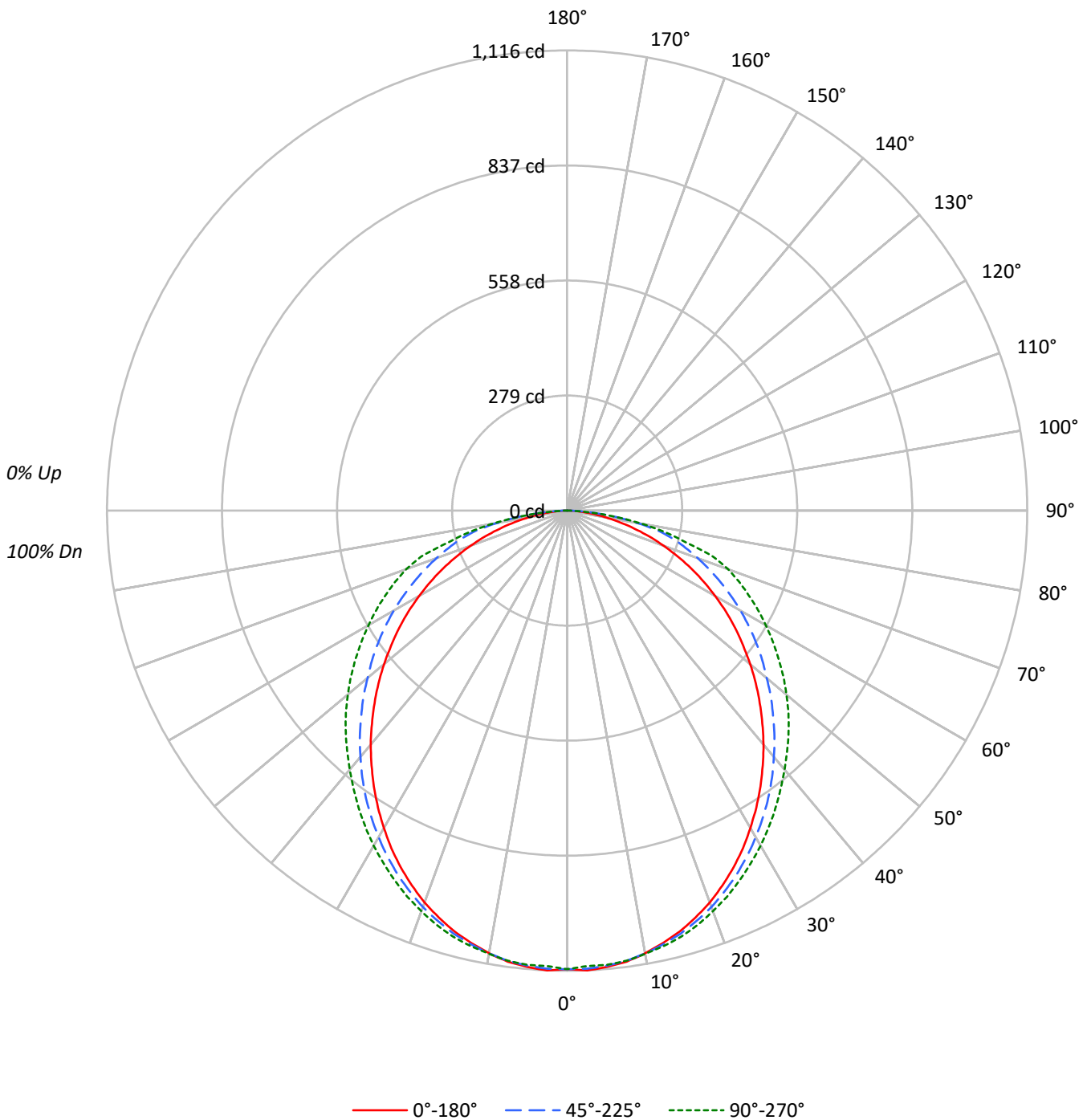
Input Watts (W): 28.922256
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1496	1496	1496
5°	1501	1496	1493
10°	1490	1490	1491
15°	1472	1480	1490
20°	1448	1465	1481
25°	1417	1445	1469
30°	1381	1421	1458
35°	1342	1397	1447
40°	1302	1370	1441
45°	1257	1344	1445
50°	1213	1322	1454
55°	1168	1313	1468
60°	1115	1305	1498
65°	1057	1306	1548
70°	978	1327	1631
75°	874	1387	1551
80°	731	1328	1421
85°	553	1022	971



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.1	3.3
10°-20°	299.1	9.4
20°-30°	447.1	14.1
30°-40°	530.4	16.7
40°-50°	546.0	17.2
50°-60°	500.8	15.8
60°-70°	405.0	12.8
70°-80°	262.8	8.3
80°-90°	72.5	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°	851.3	26.9
0°-40°	1381.8	43.6
0°-60°	2428.5	76.6
0°-90°	3168.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3168.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1112	1112	1112	1112	1112	
5°	1111	1103	1108	1107	1106	105
15°	1057	1052	1062	1066	1070	298
25°	955	956	973	982	990	439
35°	817	824	851	869	881	511
45°	661	672	706	740	760	510
55°	498	513	560	605	626	445
65°	332	352	410	464	486	328
75°	168	200	267	298	298	179
85°	36	61	66	64	63	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1112.1	1112.1	1112.1	1112.1	1112.1
2.5°	1116.4	1107.7	1112.1	1111.0	1105.6
5°	1111.0	1103.4	1107.7	1106.7	1105.6
7.5°	1103.4	1095.8	1101.2	1100.1	1101.2
10°	1090.4	1083.9	1090.4	1091.5	1091.5
12.5°	1074.1	1068.7	1077.4	1079.5	1081.7
15°	1056.7	1052.4	1062.2	1066.5	1069.8
17.5°	1035.0	1031.8	1043.7	1049.2	1053.5
20°	1011.2	1010.1	1023.1	1028.5	1034.0
22.5°	984.1	984.1	999.2	1005.8	1013.4
25°	954.8	955.8	973.2	981.9	989.5
27.5°	923.3	924.4	945.0	955.8	964.5
30°	888.6	892.9	914.6	928.7	938.5
32.5°	853.9	859.3	883.2	899.4	910.3
35°	817.0	823.5	850.6	869.1	881.0
37.5°	779.0	786.6	815.9	836.5	850.6
40°	741.0	749.7	780.1	804.0	820.2
42.5°	700.9	710.6	744.3	772.5	789.8
45°	660.7	671.6	706.3	739.9	759.5
47.5°	620.6	633.6	670.5	707.4	728.0
50°	579.4	592.4	631.4	673.8	694.4
52.5°	538.1	553.3	596.7	640.1	660.7
55°	498.0	513.2	559.8	605.4	626.0
57.5°	456.8	472.0	522.9	570.7	591.3
60°	414.5	431.8	485.0	533.8	556.6
62.5°	373.2	391.7	448.1	500.2	521.9
65°	332.0	351.5	410.1	464.4	486.1
67.5°	289.7	312.5	373.2	428.6	451.3
70°	248.5	273.4	337.4	392.8	414.5
72.5°	208.3	235.4	301.6	358.0	371.1
75°	168.2	199.6	266.9	298.4	298.4
77.5°	130.2	164.9	227.8	239.8	246.3
80°	94.4	132.4	171.4	185.5	183.4
82.5°	62.9	100.9	122.6	122.6	119.3
85°	35.8	60.8	66.2	64.0	62.9
87.5°	15.2	22.8	20.6	16.3	14.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)