

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: P229962

Luminaire Tested: **24CZ-LD5-35-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229962
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-LD5-35-UNV-L940-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH RIBBED LENS
Light Source: (168) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3083.0 lumens
Efficiency: N/A
Efficacy: 121.8 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

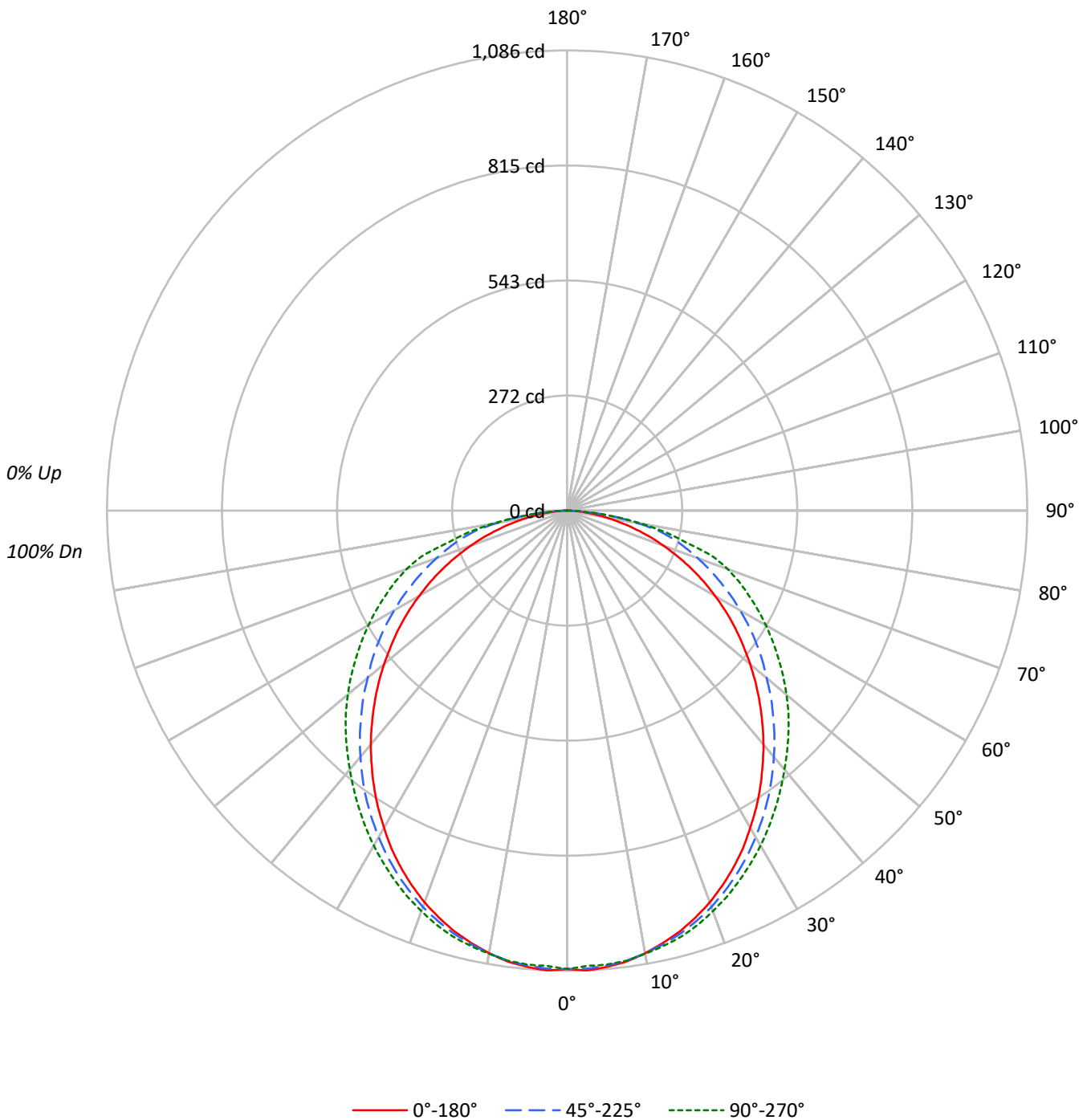
Input Watts (W): 25.32
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1456	1456	1456
5°	1460	1456	1453
10°	1449	1449	1451
15°	1432	1439	1450
20°	1409	1425	1440
25°	1379	1406	1429
30°	1343	1383	1419
35°	1306	1359	1408
40°	1266	1333	1402
45°	1223	1308	1406
50°	1180	1286	1414
55°	1137	1278	1429
60°	1085	1270	1457
65°	1028	1270	1506
70°	951	1292	1586
75°	850	1350	1509
80°	711	1292	1382
85°	537	994	945



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.2	3.3
10°-20°	291.0	9.4
20°-30°	435.0	14.1
30°-40°	516.1	16.7
40°-50°	531.2	17.2
50°-60°	487.3	15.8
60°-70°	394.0	12.8
70°-80°	255.7	8.3
80°-90°	70.5	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°	828.3	26.9
0°-40°	1344.3	43.6
0°-60°	2362.8	76.6
0°-90°	3083.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3083.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1082	1082	1082	1082	1082	
5°	1081	1074	1078	1077	1076	103
15°	1028	1024	1033	1038	1041	290
25°	929	930	947	955	963	428
35°	795	801	828	846	857	497
45°	643	653	687	720	739	496
55°	484	499	545	589	609	433
65°	323	342	399	452	473	319
75°	164	194	260	290	290	174
85°	35	59	64	62	61	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1082.0	1082.0	1082.0	1082.0	1082.0
2.5°	1086.2	1077.8	1082.0	1080.9	1075.6
5°	1080.9	1073.5	1077.8	1076.7	1075.6
7.5°	1073.5	1066.1	1071.4	1070.4	1071.4
10°	1060.9	1054.5	1060.9	1061.9	1061.9
12.5°	1045.0	1039.7	1048.2	1050.3	1052.4
15°	1028.1	1023.9	1033.4	1037.6	1040.8
17.5°	1007.0	1003.9	1015.5	1020.7	1025.0
20°	983.8	982.7	995.4	1000.7	1006.0
22.5°	957.4	957.4	972.2	978.5	985.9
25°	928.9	930.0	946.9	955.3	962.7
27.5°	898.3	899.4	919.4	930.0	938.4
30°	864.5	868.7	889.9	903.6	913.1
32.5°	830.7	836.0	859.2	875.1	885.6
35°	794.9	801.2	827.6	845.5	857.1
37.5°	757.9	765.3	793.8	813.9	827.6
40°	721.0	729.4	759.0	782.2	798.0
42.5°	681.9	691.4	724.1	751.6	768.5
45°	642.9	653.4	687.2	719.9	738.9
47.5°	603.8	616.5	652.4	688.2	708.3
50°	563.7	576.3	614.3	655.5	675.6
52.5°	523.6	538.3	580.6	622.8	642.9
55°	484.5	499.3	544.7	589.0	609.1
57.5°	444.4	459.2	508.8	555.2	575.3
60°	403.2	420.1	471.8	519.3	541.5
62.5°	363.1	381.1	436.0	486.6	507.7
65°	323.0	342.0	399.0	451.8	472.9
67.5°	281.8	304.0	363.1	417.0	439.1
70°	241.7	266.0	328.3	382.1	403.2
72.5°	202.7	229.1	293.5	348.3	361.0
75°	163.6	194.2	259.7	290.3	290.3
77.5°	126.7	160.4	221.7	233.3	239.6
80°	91.8	128.8	166.8	180.5	178.4
82.5°	61.2	98.2	119.3	119.3	116.1
85°	34.8	59.1	64.4	62.3	61.2
87.5°	14.8	22.2	20.1	15.8	13.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)