

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: P229957

Luminaire Tested: **24CZ-LD5-30-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229957
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-LD5-30-UNV-L935-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH RIBBED LENS
Light Source: (168) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2592.0 lumens
Efficiency: N/A
Efficacy: 119.9 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

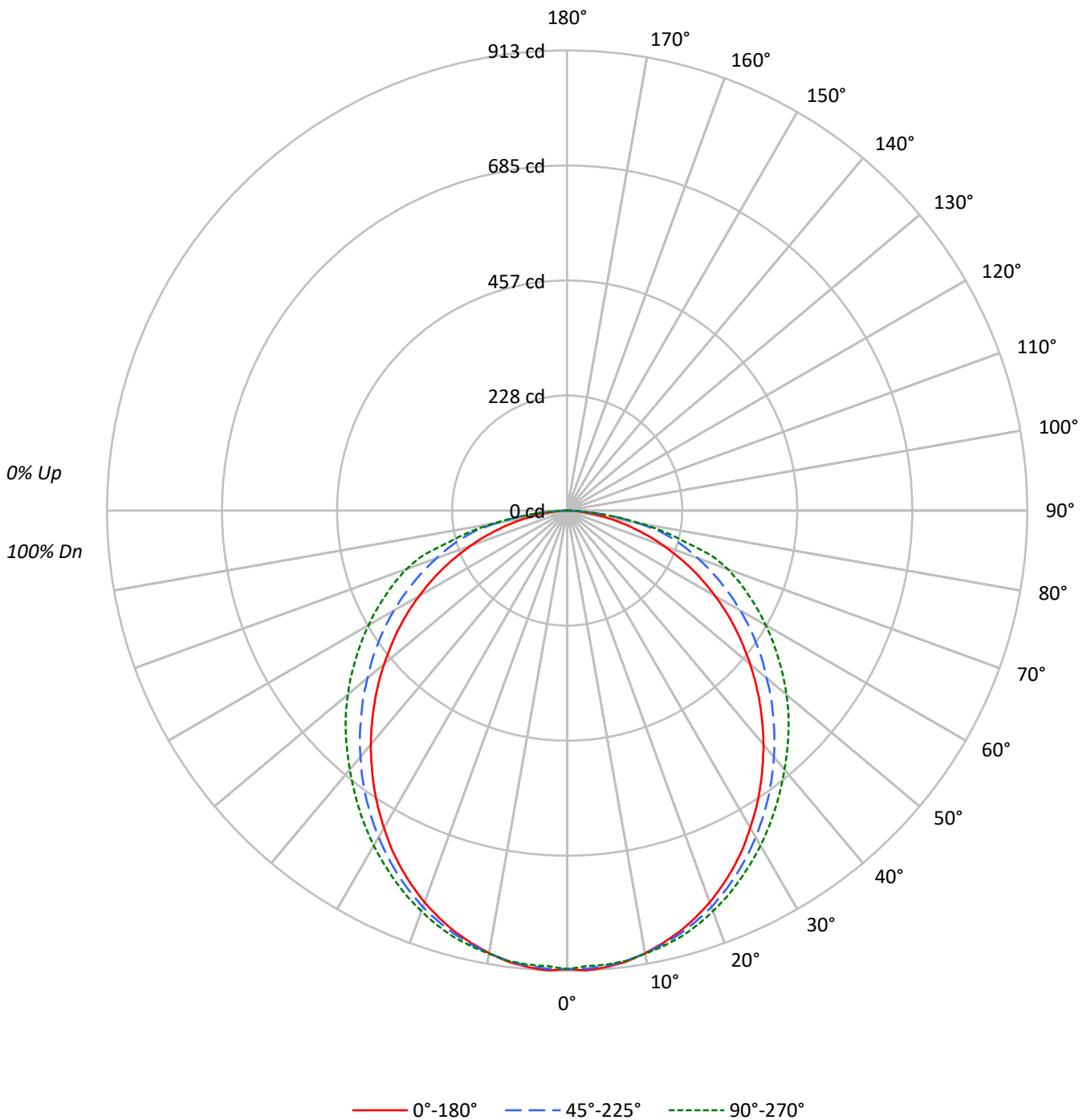
Input Watts (W): 21.62
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1224	1224	1224
5°	1227	1224	1221
10°	1219	1219	1220
15°	1204	1210	1219
20°	1184	1198	1211
25°	1159	1182	1202
30°	1129	1162	1193
35°	1098	1143	1184
40°	1065	1121	1178
45°	1028	1099	1182
50°	992	1081	1189
55°	955	1074	1201
60°	912	1068	1225
65°	865	1068	1266
70°	799	1086	1334
75°	715	1135	1269
80°	598	1086	1162
85°	452	835	795



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.0	3.3
10°-20°	244.7	9.4
20°-30°	365.7	14.1
30°-40°	433.9	16.7
40°-50°	446.6	17.2
50°-60°	409.7	15.8
60°-70°	331.2	12.8
70°-80°	215.0	8.3
80°-90°	59.3	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°	696.4	26.9
0°-40°	1130.2	43.6
0°-60°	1986.5	76.6
0°-90°	2592.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2592.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	910	910	910	910	910	
5°	909	903	906	905	904	86
15°	864	861	869	872	875	243
25°	781	782	796	803	809	359
35°	668	674	696	711	721	418
45°	540	549	578	605	621	417
55°	407	420	458	495	512	364
65°	272	288	336	380	398	268
75°	138	163	218	244	244	146
85°	29	50	54	52	52	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	909.7	909.7	909.7	909.7	909.7
2.5°	913.2	906.1	909.7	908.8	904.3
5°	908.8	902.6	906.1	905.2	904.3
7.5°	902.6	896.3	900.8	899.9	900.8
10°	891.9	886.6	891.9	892.8	892.8
12.5°	878.6	874.2	881.3	883.0	884.8
15°	864.4	860.8	868.8	872.4	875.0
17.5°	846.6	844.0	853.7	858.2	861.7
20°	827.1	826.2	836.9	841.3	845.8
22.5°	804.9	804.9	817.4	822.7	828.9
25°	781.0	781.9	796.1	803.2	809.4
27.5°	755.2	756.1	773.0	781.9	789.0
30°	726.8	730.4	748.1	759.7	767.7
32.5°	698.4	702.9	722.4	735.7	744.6
35°	668.3	673.6	695.8	710.9	720.6
37.5°	637.2	643.4	667.4	684.2	695.8
40°	606.1	613.2	638.1	657.6	670.9
42.5°	573.3	581.3	608.8	631.9	646.1
45°	540.5	549.3	577.7	605.3	621.2
47.5°	507.6	518.3	548.5	578.6	595.5
50°	473.9	484.6	516.5	551.1	568.0
52.5°	440.2	452.6	488.1	523.6	540.5
55°	407.3	419.8	457.9	495.2	512.1
57.5°	373.6	386.0	427.8	466.8	483.7
60°	339.0	353.2	396.7	436.6	455.3
62.5°	305.3	320.4	366.5	409.1	426.9
65°	271.6	287.5	335.5	379.8	397.6
67.5°	237.0	255.6	305.3	350.6	369.2
70°	203.2	223.6	276.0	321.3	339.0
72.5°	170.4	192.6	246.7	292.9	303.5
75°	137.6	163.3	218.3	244.1	244.1
77.5°	106.5	134.9	186.4	196.1	201.5
80°	77.2	108.3	140.2	151.8	150.0
82.5°	51.5	82.5	100.3	100.3	97.6
85°	29.3	49.7	54.1	52.4	51.5
87.5°	12.4	18.6	16.9	13.3	11.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)