

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: P230472

Luminaire Tested: **24CZ-LD5-45-RDP-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230472
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25696)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-45-RDP-UNV-L930-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH RDP LENS
Light Source: (168) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2437.8 lumens
Efficiency: N/A
Efficacy: 68.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

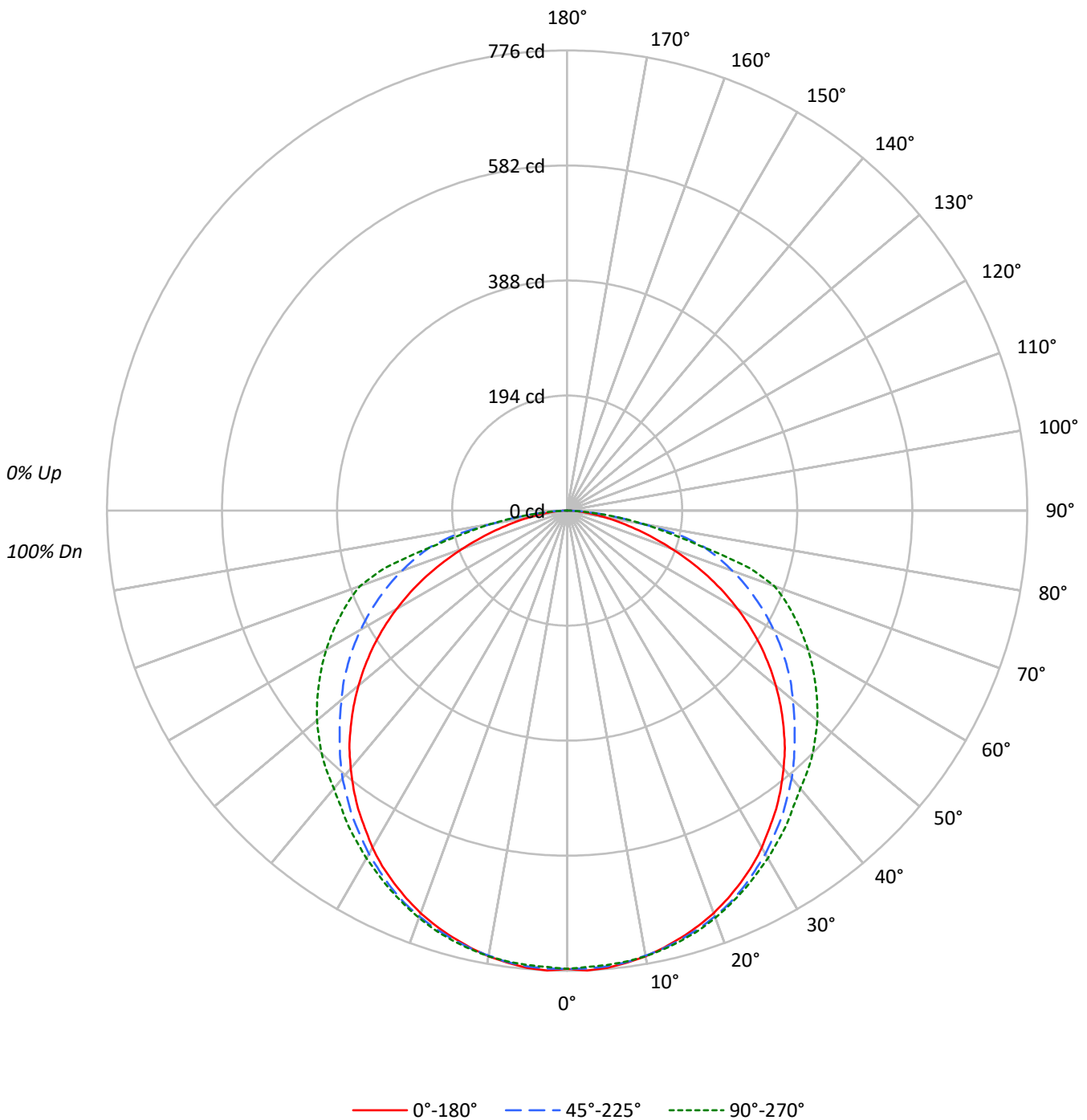
Input Watts (W): 35.69
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	101	97	93	96	93	90		92	90	87		89	87	84	82
2	98	89	82	76	95	87	80	75	83	78	73		80	75	71		77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	60		70	64	59		67	62	58	56
4	81	68	59	52	78	67	58	52	64	57	51		62	56	50		60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44		55	49	43		54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38		50	43	38		48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	34		45	38	33		44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30		42	35	30		40	34	29	27
9	55	41	33	27	53	41	32	27	39	32	27		38	32	27		37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24		35	29	24		35	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1040	1040	1040
5°	1045	1042	1039
10°	1043	1041	1043
15°	1038	1041	1045
20°	1034	1043	1046
25°	1028	1042	1048
30°	1020	1038	1052
35°	1009	1037	1060
40°	997	1035	1075
45°	982	1032	1112
50°	962	1040	1153
55°	935	1058	1199
60°	894	1082	1263
65°	833	1116	1345
70°	736	1166	1463
75°	618	1248	1229
80°	493	986	1023
85°	389	667	611



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.3	3.0
10°-20°	210.9	8.7
20°-30°	322.2	13.2
30°-40°	393.9	16.2
40°-50°	421.6	17.3
50°-60°	404.4	16.6
60°-70°	341.5	14.0
70°-80°	218.2	9.0
80°-90°	51.6	2.1
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°	606.5	24.9
0°-40°	1000.4	41.0
0°-60°	1826.4	74.9
0°-90°	2437.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2437.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	773	773	773	773	773	
5°	774	769	772	770	769	74
15°	745	743	748	750	750	210
25°	692	691	702	704	706	319
35°	614	619	631	640	646	384
45°	516	524	542	568	584	398
55°	398	412	451	492	511	356
65°	262	287	350	400	422	258
75°	119	169	240	245	236	128
85°	25	42	43	42	40	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	772.8	772.8	772.8	772.8	772.8
2.5°	776.4	771.6	772.8	772.8	770.4
5°	774.0	769.2	771.6	770.4	769.2
7.5°	769.2	765.6	768.0	768.0	766.8
10°	763.2	759.6	762.0	763.2	763.2
12.5°	754.8	752.4	756.0	756.0	757.2
15°	745.2	742.8	747.6	750.0	750.0
17.5°	734.4	733.2	739.2	740.4	741.6
20°	722.4	721.2	728.4	728.4	730.8
22.5°	708.0	706.8	716.4	716.4	718.8
25°	692.4	691.2	702.0	704.4	705.6
27.5°	675.6	674.4	685.2	688.8	691.2
30°	656.4	656.4	668.4	673.2	676.8
32.5°	634.8	638.4	649.2	656.4	661.2
35°	614.4	619.2	631.2	639.6	645.6
37.5°	591.6	596.4	609.6	620.4	627.6
40°	567.6	573.6	589.2	601.2	612.0
42.5°	543.6	549.6	566.4	584.4	598.8
45°	516.0	524.4	542.4	567.6	584.4
47.5°	488.4	496.8	519.6	550.8	567.6
50°	459.6	469.2	496.8	532.8	550.8
52.5°	429.6	440.4	475.2	513.6	531.6
55°	398.4	411.6	451.2	492.0	511.2
57.5°	366.0	380.4	427.2	470.4	490.8
60°	332.4	350.4	402.0	447.6	469.2
62.5°	297.6	319.2	376.8	423.6	446.4
65°	261.6	286.8	350.4	399.6	422.4
67.5°	224.4	258.0	324.0	375.6	398.4
70°	187.2	226.8	296.4	349.2	372.0
72.5°	152.4	198.0	268.8	318.0	322.8
75°	118.8	169.2	240.0	244.8	236.4
77.5°	88.8	140.4	198.0	176.4	175.2
80°	63.6	112.8	127.2	130.8	132.0
82.5°	42.0	85.2	82.8	85.2	84.0
85°	25.2	42.0	43.2	42.0	39.6
87.5°	12.0	15.6	12.0	10.8	9.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)