

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: P230922

Luminaire Tested: **14CZ-LD5-35-S-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230922
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35112)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ-LD5-35-S-UNV-L940-CD1-U
Description: CRUZE 1x4 LED TROFFER
WITH SMOOTH LENS
Light Source: (84) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3231.0 lumens
Efficiency: N/A
Efficacy: 102.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

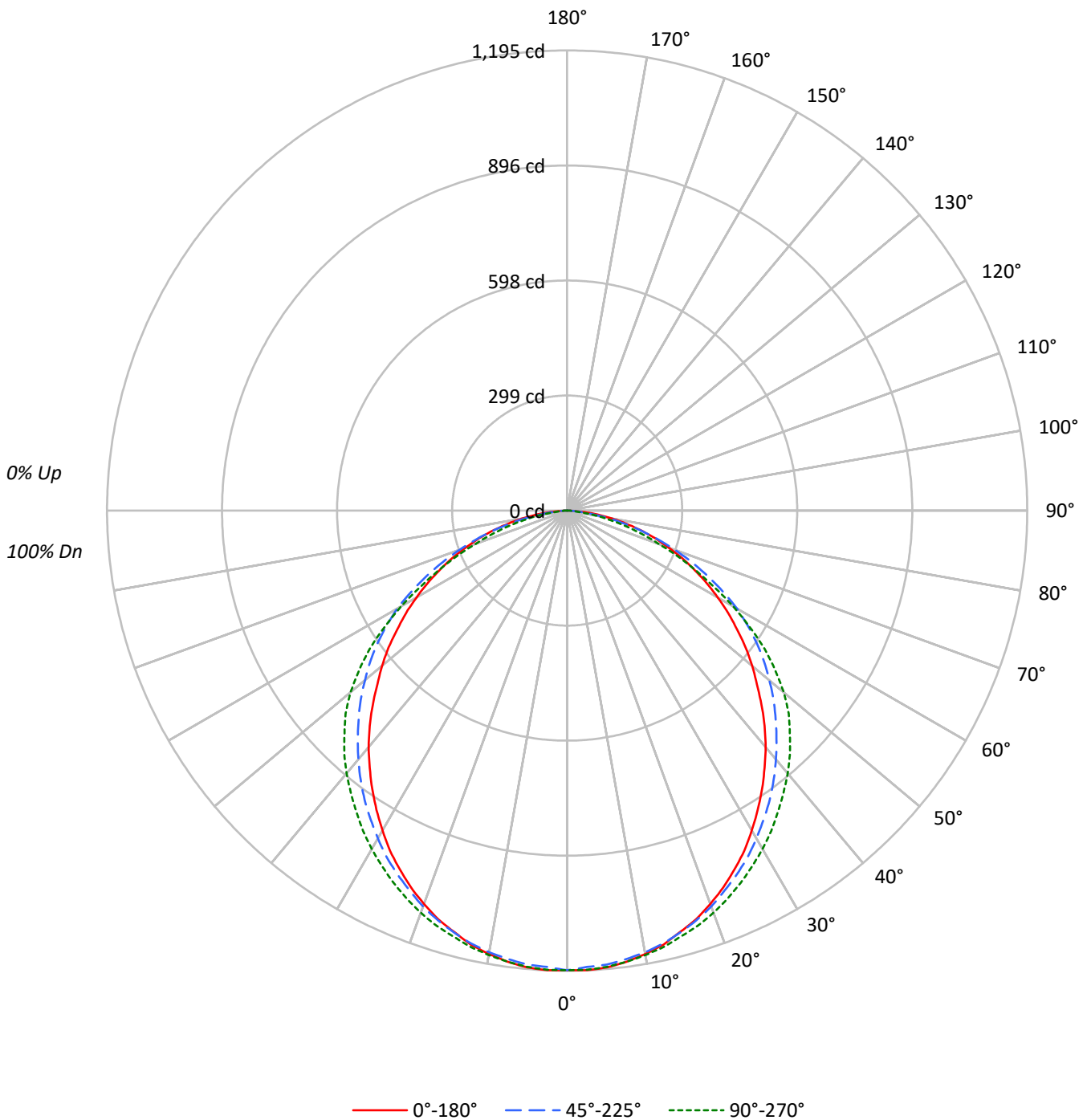
Input Watts (W): 31.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	105	100	97	106	102	98	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3212	3212	3212
5°	3216	3197	3212
10°	3195	3183	3202
15°	3157	3161	3189
20°	3113	3133	3183
25°	3052	3095	3168
30°	2980	3055	3154
35°	2899	3013	3136
40°	2817	2964	3131
45°	2718	2915	3112
50°	2628	2869	3074
55°	2526	2823	2938
60°	2433	2743	2681
65°	2329	2567	2356
70°	2198	2334	1994
75°	2050	2021	1647
80°	1807	1562	1204
85°	1423	756	667



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.8	3.5
10°-20°	321.3	9.9
20°-30°	482.2	14.9
30°-40°	574.8	17.8
40°-50°	592.1	18.3
50°-60°	527.7	16.3
60°-70°	380.2	11.8
70°-80°	198.8	6.2
80°-90°	41.1	1.3
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°	916.2	28.4
0°-40°	1491.0	46.1
0°-60°	2610.8	80.8
0°-90°	3231.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3231.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1194	1194	1194	1194	1194	
5°	1191	1188	1184	1191	1189	113
15°	1133	1134	1134	1146	1145	320
25°	1028	1034	1042	1062	1067	474
35°	883	894	917	947	954	552
45°	714	730	766	809	818	551
55°	538	556	602	629	626	483
65°	366	379	403	384	370	362
75°	197	207	194	168	158	209
85°	46	40	24	22	22	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1193.5	1193.5	1193.5	1193.5	1193.5
2.5°	1195.0	1192.1	1186.3	1193.5	1193.5
5°	1190.7	1187.8	1183.5	1190.7	1189.2
7.5°	1182.0	1179.1	1174.8	1183.5	1182.0
10°	1169.1	1167.6	1164.7	1173.4	1171.9
12.5°	1154.7	1153.2	1151.8	1160.4	1160.4
15°	1133.1	1134.5	1134.5	1146.0	1144.6
17.5°	1112.9	1114.3	1115.8	1130.2	1130.2
20°	1087.0	1088.4	1094.2	1110.0	1111.5
22.5°	1059.6	1061.1	1068.3	1087.0	1089.9
25°	1028.0	1033.7	1042.4	1062.5	1066.8
27.5°	996.3	1000.6	1015.0	1038.0	1040.9
30°	958.9	967.5	983.3	1009.2	1015.0
32.5°	921.4	931.5	950.2	979.0	986.2
35°	882.6	894.1	917.1	947.3	954.5
37.5°	842.2	852.3	881.1	912.8	922.9
40°	801.9	812.0	843.7	879.7	891.2
42.5°	758.7	773.1	804.8	845.1	856.6
45°	714.1	729.9	765.9	809.1	817.8
47.5°	668.0	685.3	727.1	770.3	780.3
50°	627.7	643.6	685.3	727.1	734.3
52.5°	584.5	598.9	645.0	679.6	681.0
55°	538.5	555.7	601.8	629.2	626.3
57.5°	496.7	511.1	555.7	570.1	561.5
60°	452.1	465.0	509.7	511.1	498.1
62.5°	408.9	421.8	456.4	446.3	430.5
65°	365.7	378.6	403.1	384.4	370.0
67.5°	323.9	335.5	349.9	325.4	311.0
70°	279.3	295.1	296.6	267.8	253.4
72.5°	240.4	249.1	246.2	218.8	205.9
75°	197.2	207.3	194.4	168.4	158.4
77.5°	156.9	164.1	146.9	122.4	115.2
80°	116.6	120.9	100.8	82.1	77.7
82.5°	79.2	79.2	57.6	44.6	40.3
85°	46.1	40.3	24.5	21.6	21.6
87.5°	15.8	10.1	10.1	10.1	10.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)