

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: P230898

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230898
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35573)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ-LD5-35-UNV-L940-CD1-U
Description: CRUZE 1x4 LED TROFFER
WITH RIBBED LENS
Light Source: (84) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3167.0 lumens
Efficiency: N/A
Efficacy: 100.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

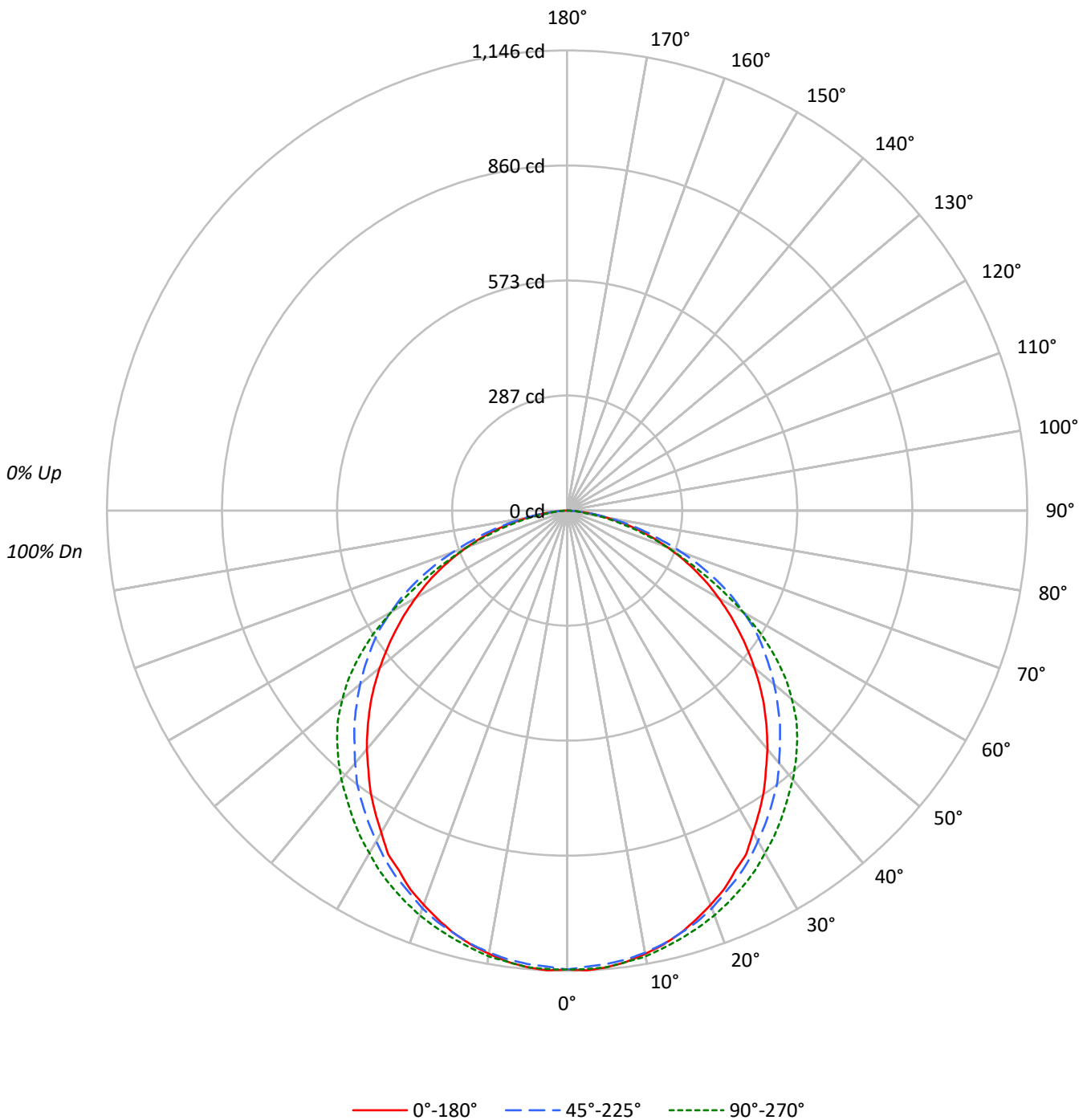
Input Watts (W): 31.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	90	80	72	66	88	78	71	65	75	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	46	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	36	34
8	61	47	39	33	59	46	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	29	42	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3076	3076	3076
5°	3083	3062	3083
10°	3063	3055	3080
15°	3036	3036	3071
20°	2991	3018	3072
25°	2939	2990	3069
30°	2877	2954	3061
35°	2805	2923	3062
40°	2726	2885	3071
45°	2644	2852	3084
50°	2549	2817	3059
55°	2447	2791	2959
60°	2344	2731	2723
65°	2237	2614	2386
70°	2076	2383	2064
75°	1883	2077	1704
80°	1500	1646	1258
85°	1059	917	722



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.1	3.4
10°-20°	308.9	9.8
20°-30°	465.8	14.7
30°-40°	558.3	17.6
40°-50°	579.4	18.3
50°-60°	522.6	16.5
60°-70°	381.2	12.0
70°-80°	200.0	6.3
80°-90°	42.7	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°	882.8	27.9
0°-40°	1441.1	45.5
0°-60°	2543.1	80.3
0°-90°	3167.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3167.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1143	1143	1143	1143	1143	
5°	1141	1138	1134	1141	1141	108
15°	1090	1090	1090	1102	1102	307
25°	990	995	1007	1029	1034	457
35°	854	863	890	923	932	533
45°	695	709	749	795	810	536
55°	522	540	595	634	631	467
65°	351	372	411	395	375	347
75°	181	206	200	173	164	190
85°	34	42	30	25	23	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1142.9	1142.9	1142.9	1142.9	1142.9
2.5°	1146.0	1142.9	1136.6	1142.9	1142.9
5°	1141.3	1138.2	1133.5	1141.3	1141.3
7.5°	1133.5	1130.4	1127.3	1135.1	1133.5
10°	1121.0	1119.5	1117.9	1127.3	1127.3
12.5°	1107.0	1107.0	1105.4	1116.3	1114.8
15°	1089.8	1089.8	1089.8	1102.3	1102.3
17.5°	1067.9	1071.1	1074.2	1088.2	1088.2
20°	1044.5	1047.6	1053.9	1071.1	1072.6
22.5°	1021.1	1022.7	1028.9	1049.2	1053.9
25°	989.9	994.6	1007.0	1028.9	1033.6
27.5°	964.9	966.5	980.5	1005.5	1011.7
30°	925.9	936.8	950.8	978.9	985.2
32.5°	889.9	899.3	921.2	950.8	960.2
35°	854.0	863.4	889.9	922.7	932.1
37.5°	813.4	827.5	858.7	891.5	902.4
40°	776.0	788.5	821.3	861.8	874.3
42.5°	735.4	747.9	783.8	829.1	843.1
45°	694.8	708.8	749.4	794.7	810.3
47.5°	652.6	668.2	710.4	760.4	774.4
50°	608.9	626.1	672.9	724.4	730.7
52.5°	565.2	583.9	633.9	679.2	685.4
55°	521.5	540.2	594.9	633.9	630.8
57.5°	479.3	499.6	555.8	576.1	573.0
60°	435.6	457.5	507.4	516.8	505.9
62.5°	395.0	415.3	462.1	454.3	440.3
65°	351.3	371.6	410.6	395.0	374.7
67.5°	307.6	332.6	357.5	331.0	315.4
70°	263.9	292.0	302.9	276.4	262.3
72.5°	221.7	251.4	248.2	221.7	212.3
75°	181.1	206.1	199.8	173.3	163.9
77.5°	137.4	165.5	151.4	129.6	121.8
80°	96.8	121.8	106.2	87.4	81.2
82.5°	64.0	81.2	65.6	51.5	46.8
85°	34.3	42.2	29.7	25.0	23.4
87.5°	14.1	12.5	10.9	10.9	9.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)