

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: P230923

Luminaire Tested: **14CZ-LD5-35-S-UNV-L950-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230923  
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-L950-CD1-U  
Description: CRUZE 1x4 LED TROFFER  
WITH SMOOTH LENS  
Light Source: (84) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3515.0 lumens  
Efficiency: N/A  
Efficacy: 111.6 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

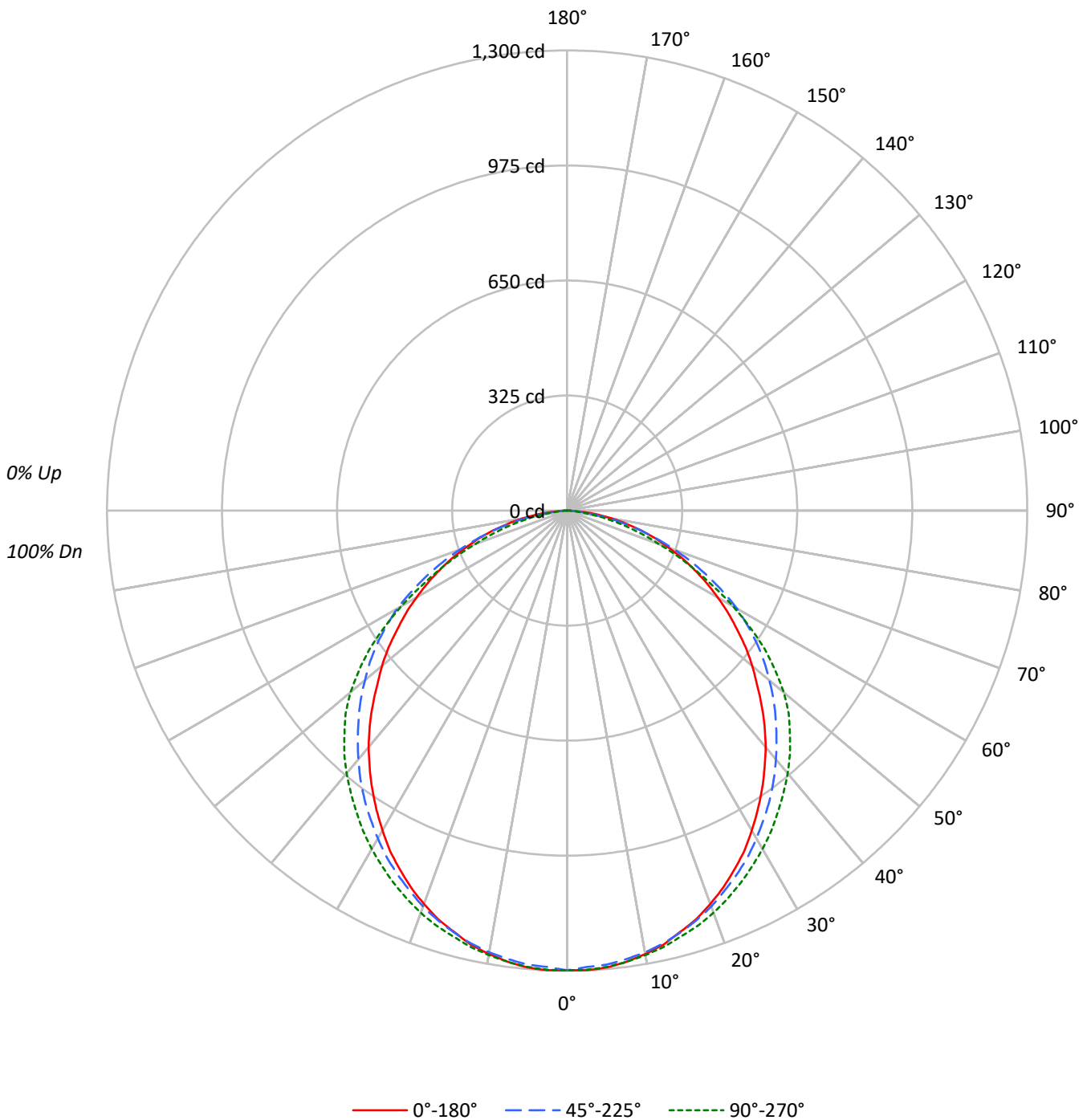
Input Watts (W): 31.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	109	105	100	97	106	102	98	95	98	95	92	94	92	89	91	89	87	85					85			
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71					71			
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60					60			
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51					51			
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44					44			
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39					39			
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34					34			
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31					31			
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28					28			
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25					25			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3494	3494	3494
5°	3499	3478	3495
10°	3475	3462	3484
15°	3434	3438	3469
20°	3386	3409	3463
25°	3320	3367	3446
30°	3241	3324	3431
35°	3154	3278	3411
40°	3065	3224	3406
45°	2957	3171	3385
50°	2859	3121	3344
55°	2748	3072	3196
60°	2647	2984	2916
65°	2533	2793	2563
70°	2391	2539	2169
75°	2231	2198	1791
80°	1967	1698	1311
85°	1547	821	726



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.7	3.5
10°-20°	349.5	9.9
20°-30°	524.5	14.9
30°-40°	625.4	17.8
40°-50°	644.1	18.3
50°-60°	574.1	16.3
60°-70°	413.6	11.8
70°-80°	216.3	6.2
80°-90°	44.8	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°	996.8	28.4
0°-40°	1622.1	46.1
0°-60°	2840.3	80.8
0°-90°	3515.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3515.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1298	1298	1298	1298	1298	
5°	1295	1292	1288	1295	1294	123
15°	1233	1234	1234	1247	1245	348
25°	1118	1125	1134	1156	1161	515
35°	960	973	998	1031	1038	600
45°	777	794	833	880	890	599
55°	586	605	655	684	681	525
65°	398	412	439	418	402	394
75°	215	226	211	183	172	227
85°	50	44	27	24	24	59
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1298.4	1298.4	1298.4	1298.4	1298.4
2.5°	1300.0	1296.9	1290.6	1298.4	1298.4
5°	1295.3	1292.2	1287.5	1295.3	1293.7
7.5°	1285.9	1282.8	1278.1	1287.5	1285.9
10°	1271.8	1270.2	1267.1	1276.5	1274.9
12.5°	1256.2	1254.6	1253.0	1262.4	1262.4
15°	1232.7	1234.2	1234.2	1246.8	1245.2
17.5°	1210.7	1212.3	1213.9	1229.5	1229.5
20°	1182.5	1184.1	1190.4	1207.6	1209.2
22.5°	1152.8	1154.3	1162.2	1182.5	1185.7
25°	1118.3	1124.6	1134.0	1155.9	1160.6
27.5°	1083.9	1088.6	1104.2	1129.3	1132.4
30°	1043.1	1052.5	1069.8	1098.0	1104.2
32.5°	1002.4	1013.4	1033.7	1065.1	1072.9
35°	960.1	972.7	997.7	1030.6	1038.4
37.5°	916.3	927.2	958.6	993.0	1004.0
40°	872.4	883.4	917.8	957.0	969.5
42.5°	825.4	841.1	875.5	919.4	931.9
45°	776.9	794.1	833.3	880.2	889.6
47.5°	726.8	745.5	791.0	838.0	848.9
50°	682.9	700.1	745.5	791.0	798.8
52.5°	635.9	651.6	701.7	739.3	740.8
55°	585.8	604.6	654.7	684.5	681.3
57.5°	540.4	556.0	604.6	620.2	610.8
60°	491.8	505.9	554.5	556.0	541.9
62.5°	444.8	458.9	496.5	485.5	468.3
65°	397.8	411.9	438.6	418.2	402.5
67.5°	352.4	364.9	380.6	354.0	338.3
70°	303.9	321.1	322.7	291.3	275.7
72.5°	261.6	271.0	267.8	238.1	224.0
75°	214.6	225.5	211.4	183.3	172.3
77.5°	170.7	178.6	159.8	133.1	125.3
80°	126.9	131.6	109.6	89.3	84.6
82.5°	86.1	86.1	62.7	48.6	43.9
85°	50.1	43.9	26.6	23.5	23.5
87.5°	17.2	11.0	11.0	11.0	11.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)