

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: P230921

Luminaire Tested: **14CZ-LD5-35-S-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230921
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-L935-CD1-U
Description: CRUZE 1x4 LED TROFFER
WITH SMOOTH LENS
Light Source: (84) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3153.0 lumens
Efficiency: N/A
Efficacy: 100.1 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

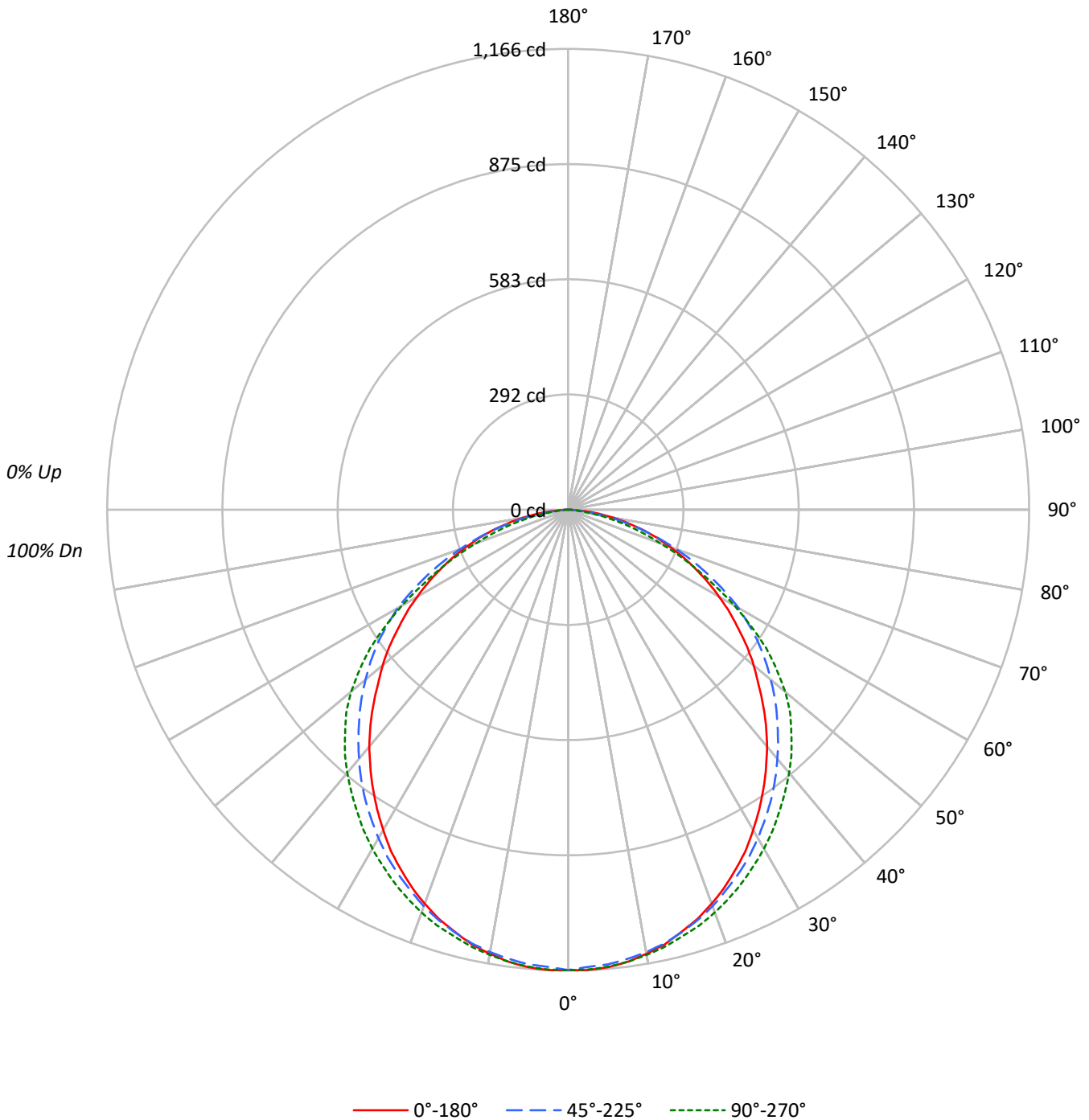
Input Watts (W): 31.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3134	3134	3134
5°	3139	3120	3135
10°	3117	3106	3125
15°	3080	3084	3112
20°	3038	3058	3106
25°	2978	3020	3091
30°	2907	2982	3078
35°	2829	2940	3060
40°	2749	2892	3055
45°	2652	2844	3037
50°	2565	2800	3000
55°	2465	2755	2867
60°	2375	2677	2616
65°	2273	2505	2299
70°	2145	2277	1946
75°	2001	1972	1606
80°	1764	1523	1176
85°	1389	738	651



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.1	3.5
10°-20°	313.5	9.9
20°-30°	470.5	14.9
30°-40°	561.0	17.8
40°-50°	577.8	18.3
50°-60°	514.9	16.3
60°-70°	371.0	11.8
70°-80°	194.0	6.2
80°-90°	40.1	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°	894.1	28.4
0°-40°	1455.1	46.1
0°-60°	2547.8	80.8
0°-90°	3153.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3153.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1165	1165	1165	1165	1165	
5°	1162	1159	1155	1162	1160	110
15°	1106	1107	1107	1118	1117	312
25°	1003	1009	1017	1037	1041	462
35°	861	872	895	924	932	539
45°	697	712	747	790	798	538
55°	526	542	587	614	611	471
65°	357	370	393	375	361	354
75°	192	202	190	164	154	204
85°	45	39	24	21	21	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1164.7	1164.7	1164.7	1164.7	1164.7
2.5°	1166.1	1163.3	1157.7	1164.7	1164.7
5°	1161.9	1159.1	1154.9	1161.9	1160.5
7.5°	1153.5	1150.7	1146.5	1154.9	1153.5
10°	1140.8	1139.4	1136.6	1145.0	1143.6
12.5°	1126.8	1125.4	1124.0	1132.4	1132.4
15°	1105.7	1107.1	1107.1	1118.4	1117.0
17.5°	1086.0	1087.4	1088.9	1102.9	1102.9
20°	1060.8	1062.2	1067.8	1083.2	1084.6
22.5°	1034.1	1035.5	1042.5	1060.8	1063.6
25°	1003.1	1008.8	1017.2	1036.9	1041.1
27.5°	972.2	976.5	990.5	1013.0	1015.8
30°	935.7	944.1	959.6	984.9	990.5
32.5°	899.2	909.0	927.3	955.4	962.4
35°	861.2	872.5	895.0	924.5	931.5
37.5°	821.9	831.7	859.8	890.8	900.6
40°	782.6	792.4	823.3	858.4	869.7
42.5°	740.4	754.5	785.4	824.7	836.0
45°	696.9	712.3	747.4	789.6	798.0
47.5°	651.9	668.8	709.5	751.7	761.5
50°	612.6	628.0	668.8	709.5	716.5
52.5°	570.4	584.5	629.4	663.1	664.6
55°	525.5	542.3	587.3	614.0	611.2
57.5°	484.7	498.8	542.3	556.4	547.9
60°	441.2	453.8	497.4	498.8	486.1
62.5°	399.0	411.7	445.4	435.5	420.1
65°	356.9	369.5	393.4	375.1	361.1
67.5°	316.1	327.4	341.4	317.5	303.5
70°	272.6	288.0	289.4	261.3	247.3
72.5°	234.6	243.1	240.2	213.6	200.9
75°	192.5	202.3	189.7	164.4	154.5
77.5°	153.1	160.2	143.3	119.4	112.4
80°	113.8	118.0	98.3	80.1	75.9
82.5°	77.3	77.3	56.2	43.6	39.3
85°	45.0	39.3	23.9	21.1	21.1
87.5°	15.5	9.8	9.8	9.8	9.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)