

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: P387552

Luminaire Tested: **14CZ2-48HE-SQR-UNV-L930-CD1-SDWPD1-U**

Issue Date: 2/28/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P387552
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1911-580-2)
Test Lab: INNOVATIONS CENTER(G2)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-48HE-SQR-UNV-L930-CD1-SDWPD1-U
Description: 1x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3728.7 lumens
Efficiency: N/A
Efficacy: 101.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.34 / 1.44
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

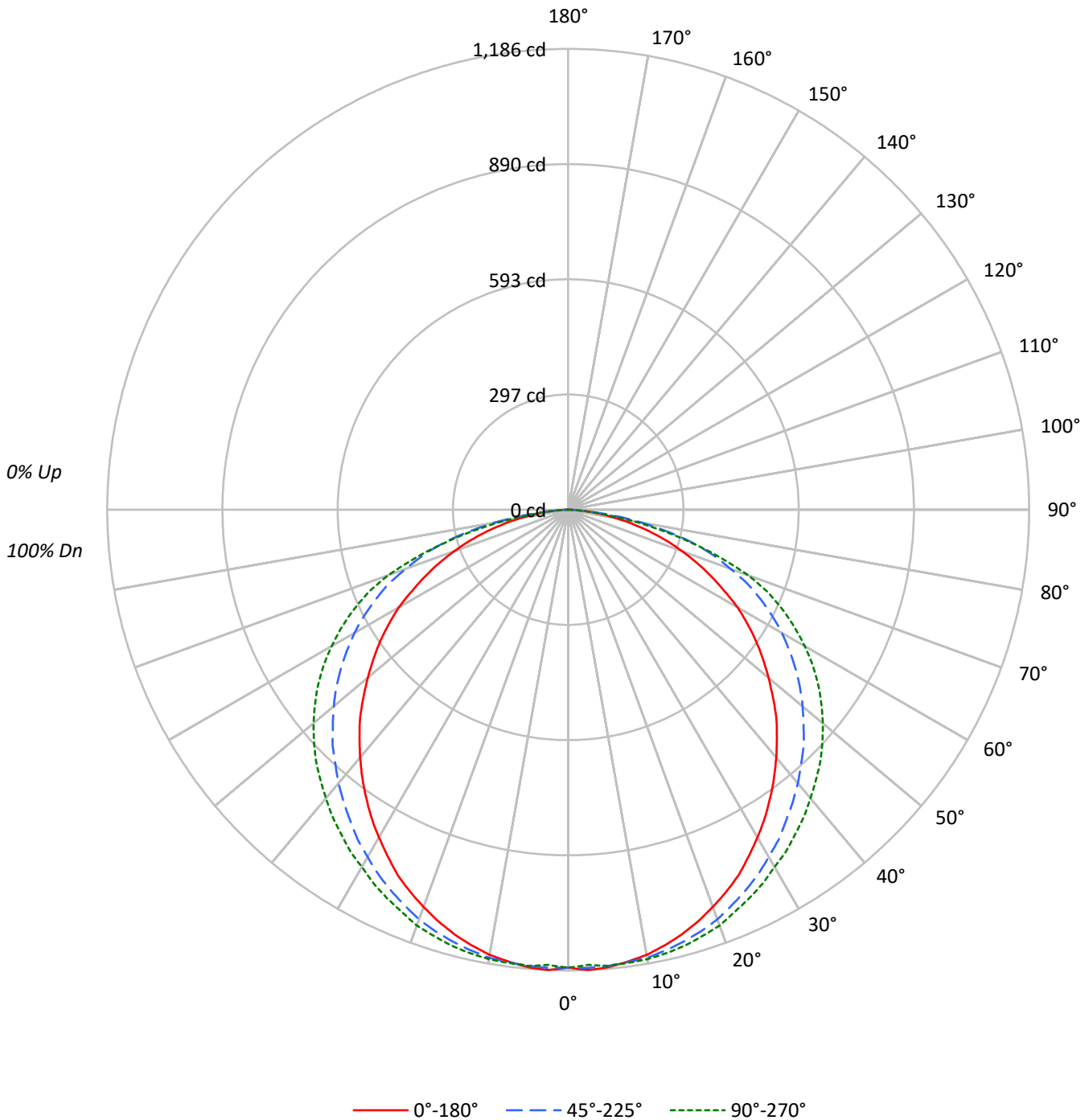
Input Watts (W): 36.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	68	59	52	79	67	59	52	65	57	51	62	56	51	60	54	50	48
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41
6	68	55	45	39	67	54	45	39	52	44	38	50	43	38	49	42	38	35
7	63	49	40	34	62	49	40	34	47	39	34	46	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	41	34	30	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	52	38	30	25	50	37	30	24	36	29	24	36	29	24	35	29	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3171	3171	3171
5°	3193	3183	3183
10°	3179	3199	3209
15°	3152	3204	3236
20°	3116	3213	3261
25°	3080	3208	3275
30°	3025	3206	3299
35°	2976	3210	3346
40°	2924	3228	3406
45°	2882	3261	3490
50°	2817	3296	3580
55°	2769	3350	3685
60°	2710	3419	3782
65°	2585	3482	3877
70°	2455	3489	3874
75°	2247	3478	3420
80°	1922	2971	2650
85°	1510	1683	985



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.0	3.0
10°-20°	323.5	8.7
20°-30°	494.7	13.3
30°-40°	606.4	16.3
40°-50°	652.1	17.5
50°-60°	626.7	16.8
60°-70°	521.8	14.0
70°-80°	320.3	8.6
80°-90°	71.3	1.9
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°	930.1	24.9
0°-40°	1536.5	41.2
0°-60°	2815.3	75.5
0°-90°	3728.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3728.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1178	1178	1178	1178	1178	
5°	1182	1171	1178	1178	1178	112
15°	1131	1128	1150	1158	1161	319
25°	1037	1047	1081	1094	1103	477
35°	906	928	977	1004	1019	567
45°	757	791	857	896	917	583
55°	590	641	714	763	786	527
65°	406	468	547	592	609	402
75°	216	282	334	333	329	229
85°	49	73	54	38	32	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1178.3	1178.3	1178.3	1178.3	1178.3
2.5°	1185.8	1174.5	1180.2	1178.3	1172.7
5°	1182.1	1170.8	1178.3	1178.3	1178.3
7.5°	1172.7	1163.3	1174.5	1176.4	1176.4
10°	1163.3	1155.8	1170.8	1172.7	1174.5
12.5°	1148.2	1142.6	1161.4	1165.1	1168.9
15°	1131.3	1127.6	1150.1	1157.6	1161.4
17.5°	1110.6	1112.5	1137.0	1146.4	1150.1
20°	1088.1	1093.7	1121.9	1131.3	1138.8
22.5°	1063.7	1071.2	1101.3	1112.5	1120.0
25°	1037.4	1046.8	1080.6	1093.7	1103.1
27.5°	1005.4	1020.4	1058.0	1074.9	1084.3
30°	973.5	990.4	1031.7	1052.4	1061.8
32.5°	941.5	960.3	1007.3	1028.0	1043.0
35°	905.8	928.4	977.2	1003.5	1018.6
37.5°	870.1	896.4	949.0	979.1	996.0
40°	832.5	860.7	919.0	952.8	969.7
42.5°	794.9	826.9	887.0	924.6	943.4
45°	757.3	791.2	856.9	896.4	917.1
47.5°	714.1	755.5	821.2	866.3	887.0
50°	672.8	717.9	787.4	834.4	855.1
52.5°	631.4	678.4	751.7	800.6	821.2
55°	590.1	640.8	714.1	763.0	785.5
57.5°	546.9	599.5	674.7	725.4	746.1
60°	503.6	558.1	635.2	682.2	702.8
62.5°	452.9	516.8	592.0	639.0	657.7
65°	405.9	467.9	546.9	592.0	608.9
67.5°	358.9	422.8	499.9	541.2	556.3
70°	312.0	375.9	443.5	483.0	492.4
72.5°	265.0	328.9	392.8	415.3	411.6
75°	216.1	281.9	334.5	332.6	328.9
77.5°	169.1	233.0	265.0	251.8	246.2
80°	124.0	186.0	191.7	178.5	171.0
82.5°	84.6	133.4	120.3	105.2	97.7
85°	48.9	73.3	54.5	37.6	31.9
87.5°	20.7	18.8	5.6	5.6	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)