

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: P390190

Luminaire Tested: **22CZ2-24VHE-RDP-UNV-L930-CD1-SWPD1-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: P390190
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-24VHE-RDP-UNV-L930-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1370.6 lumens
Efficiency: N/A
Efficacy: 78.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

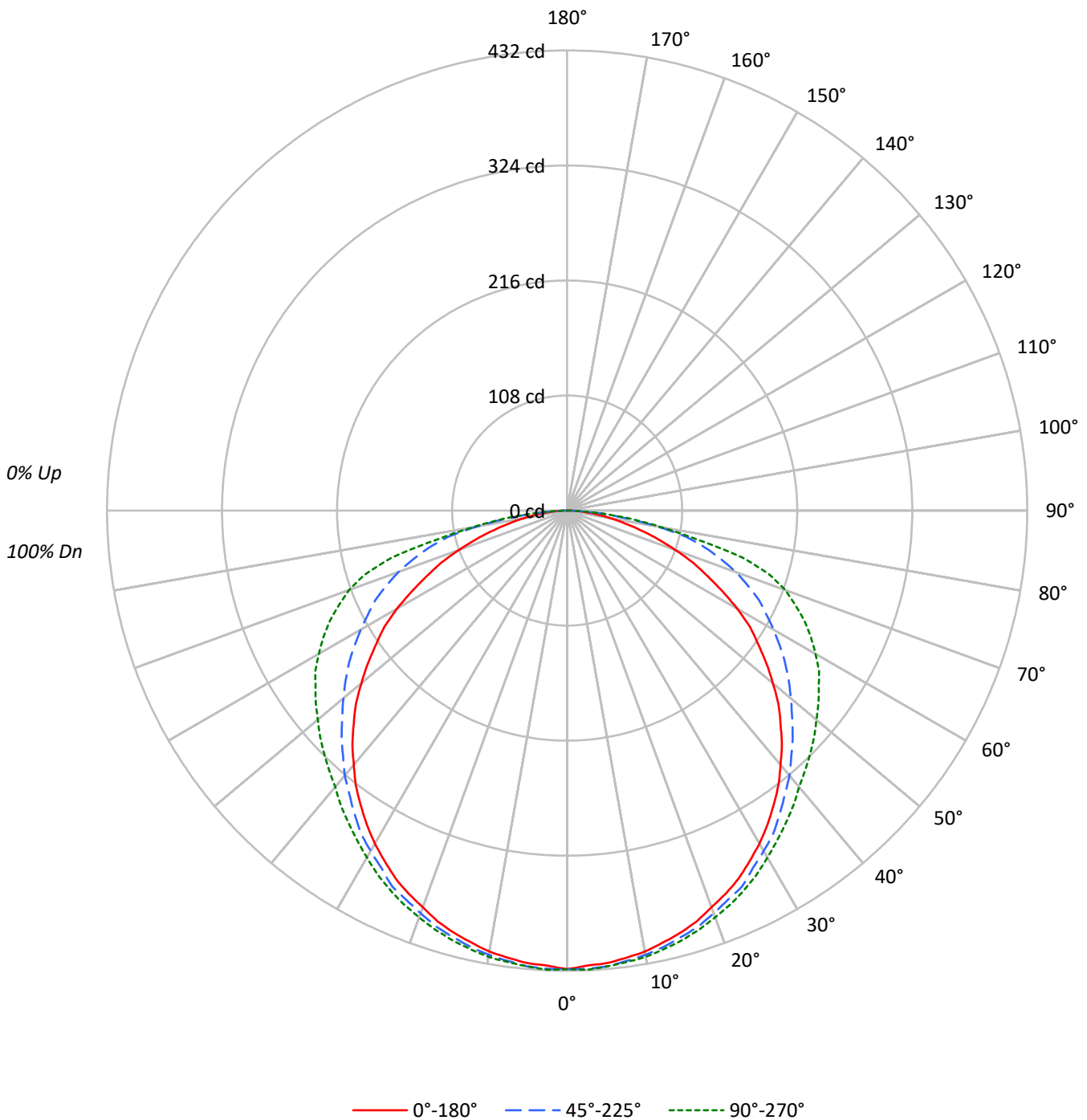
Input Watts (W): 17.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1158	1158	1158
5°	1152	1160	1160
10°	1149	1157	1163
15°	1143	1154	1163
20°	1135	1152	1164
25°	1132	1156	1167
30°	1122	1147	1169
35°	1110	1143	1176
40°	1095	1141	1190
45°	1078	1140	1228
50°	1055	1148	1279
55°	1027	1173	1353
60°	993	1204	1449
65°	925	1265	1566
70°	849	1325	1714
75°	744	1394	1772
80°	640	1328	1390
85°	559	966	1059



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.7	3.0
10°-20°	116.9	8.5
20°-30°	178.4	13.0
30°-40°	217.8	15.9
40°-50°	232.9	17.0
50°-60°	224.8	16.4
60°-70°	193.5	14.1
70°-80°	130.9	9.6
80°-90°	34.6	2.5
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°	336.1	24.5
0°-40°	553.9	40.4
0°-60°	1011.6	73.8
0°-90°	1370.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1370.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	430	430	430	430	430	
5°	426	428	430	430	430	41
15°	410	411	414	416	417	116
25°	381	383	389	391	393	175
35°	338	341	348	355	358	211
45°	283	288	300	315	323	219
55°	219	226	250	275	288	196
65°	145	159	199	230	246	144
75°	72	95	134	161	170	77
85°	18	25	31	32	34	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	430.5	430.5	430.5	430.5	430.5
2.5°	427.5	428.5	430.5	430.5	431.5
5°	426.5	427.5	429.5	429.5	429.5
7.5°	423.5	424.5	426.5	427.5	427.5
10°	420.4	421.5	423.5	424.5	425.5
12.5°	415.4	416.4	419.4	421.5	421.5
15°	410.4	411.4	414.4	416.4	417.4
17.5°	404.3	406.3	409.4	411.4	412.4
20°	396.2	398.3	402.3	405.3	406.3
22.5°	389.2	391.2	395.2	398.3	400.3
25°	381.1	383.1	389.2	391.2	393.2
27.5°	371.0	373.1	378.1	382.1	385.2
30°	361.0	363.0	369.0	374.1	376.1
32.5°	349.9	352.9	360.0	364.0	367.0
35°	337.8	340.8	347.9	354.9	357.9
37.5°	325.7	328.7	335.8	344.8	348.9
40°	311.6	315.6	324.7	336.8	338.8
42.5°	298.4	303.5	311.6	325.7	330.7
45°	283.3	288.4	299.5	314.6	322.6
47.5°	269.2	274.2	286.3	304.5	314.6
50°	252.1	259.1	274.2	295.4	305.5
52.5°	235.9	242.0	262.1	285.3	297.4
55°	218.8	225.9	250.0	275.3	288.4
57.5°	203.7	209.7	236.9	265.2	280.3
60°	184.5	192.6	223.8	254.1	269.2
62.5°	164.3	176.4	210.7	242.0	258.1
65°	145.2	159.3	198.6	229.9	246.0
67.5°	128.0	143.2	183.5	216.8	231.9
70°	107.9	127.0	168.4	200.6	217.8
72.5°	89.7	110.9	151.2	183.5	198.6
75°	71.6	94.8	134.1	161.3	170.4
77.5°	55.5	77.6	114.9	123.0	124.0
80°	41.3	61.5	85.7	86.7	89.7
82.5°	28.2	43.4	55.5	60.5	61.5
85°	18.1	25.2	31.3	32.3	34.3
87.5°	8.1	9.1	11.1	10.1	10.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)