

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: P391437

Luminaire Tested: **24CZ2-50VHE-RDP-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: P391437
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-50VHE-RDP-UNV-L930-CD1-SDWPD1-U
Description: 2x4 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: 2741.7 lumens
Efficiency: N/A
Efficacy: 83.8 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

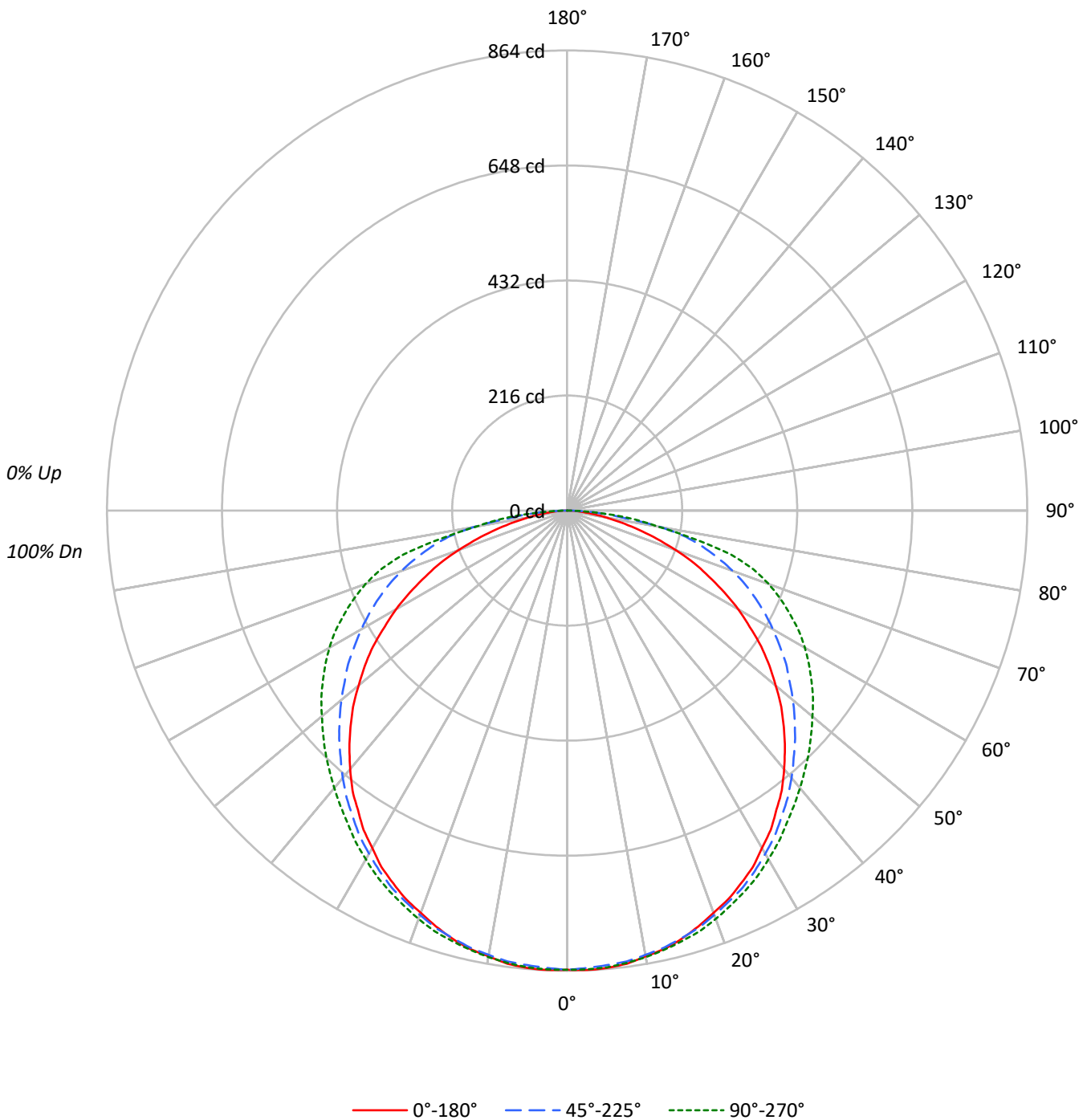
Input Watts (W): 32.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	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°	1160	1160	1160
5°	1165	1157	1163
10°	1161	1157	1163
15°	1159	1157	1165
20°	1151	1157	1168
25°	1147	1159	1171
30°	1137	1156	1175
35°	1126	1153	1179
40°	1113	1151	1194
45°	1094	1152	1221
50°	1070	1159	1258
55°	1043	1177	1314
60°	999	1200	1387
65°	935	1243	1472
70°	851	1300	1583
75°	721	1371	1654
80°	569	1380	1338
85°	420	1050	1176



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.8	3.0
10°-20°	235.4	8.6
20°-30°	360.0	13.1
30°-40°	440.0	16.0
40°-50°	469.0	17.1
50°-60°	448.4	16.4
60°-70°	379.9	13.9
70°-80°	255.3	9.3
80°-90°	72.0	2.6
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°	677.1	24.7
0°-40°	1117.1	40.7
0°-60°	2034.5	74.2
0°-90°	2741.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2741.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	862	862	862	862	862	
5°	862	861	857	861	861	82
15°	832	832	831	838	836	235
25°	772	775	781	787	789	356
35°	685	691	702	715	718	429
45°	575	585	605	631	642	444
55°	445	461	502	541	560	396
65°	294	324	390	442	462	292
75°	139	189	264	309	318	149
85°	27	56	68	73	76	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	862.2	862.2	862.2	862.2	862.2
2.5°	863.5	863.5	859.5	862.2	862.2
5°	862.2	860.8	856.7	860.8	860.8
7.5°	858.1	856.7	854.0	858.1	856.7
10°	849.9	849.9	847.2	851.3	851.3
12.5°	843.1	841.8	840.4	845.9	844.5
15°	832.3	832.3	830.9	837.7	836.3
17.5°	818.7	820.0	821.4	826.8	828.2
20°	803.7	806.4	807.8	815.9	815.9
22.5°	790.1	791.5	794.2	802.4	802.4
25°	772.4	775.2	780.6	787.4	788.8
27.5°	754.8	756.1	762.9	772.4	773.8
30°	731.6	735.7	743.9	754.8	756.1
32.5°	711.2	715.3	724.8	735.7	738.4
35°	685.4	690.8	701.7	715.3	718.0
37.5°	662.3	666.4	680.0	694.9	699.0
40°	633.7	641.9	655.5	673.2	680.0
42.5°	605.2	613.3	629.6	652.8	660.9
45°	575.2	584.8	605.2	631.0	641.9
47.5°	545.3	556.2	579.3	609.2	621.5
50°	511.3	524.9	553.5	587.5	601.1
52.5°	478.7	495.0	526.3	564.4	582.0
55°	444.7	461.0	501.8	541.2	560.3
57.5°	406.6	428.4	473.3	518.1	538.5
60°	371.3	391.7	446.1	495.0	515.4
62.5°	333.2	360.4	418.9	470.5	490.9
65°	293.7	323.7	390.3	442.0	462.4
67.5°	258.4	291.0	361.7	413.4	433.8
70°	216.2	257.0	330.5	382.1	402.5
72.5°	176.8	221.7	297.8	348.1	367.2
75°	138.7	189.0	263.8	308.7	318.2
77.5°	103.4	156.4	228.5	247.5	240.7
80°	73.4	125.1	178.1	168.6	172.7
82.5°	47.6	95.2	110.2	125.1	129.2
85°	27.2	55.8	68.0	73.4	76.2
87.5°	12.2	20.4	27.2	27.2	25.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)