

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: P391438

Luminaire Tested: **24CZ2-50VHE-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: P391438
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-SWPD1-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: 2775.2 lumens
Efficiency: N/A
Efficacy: 84.9 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

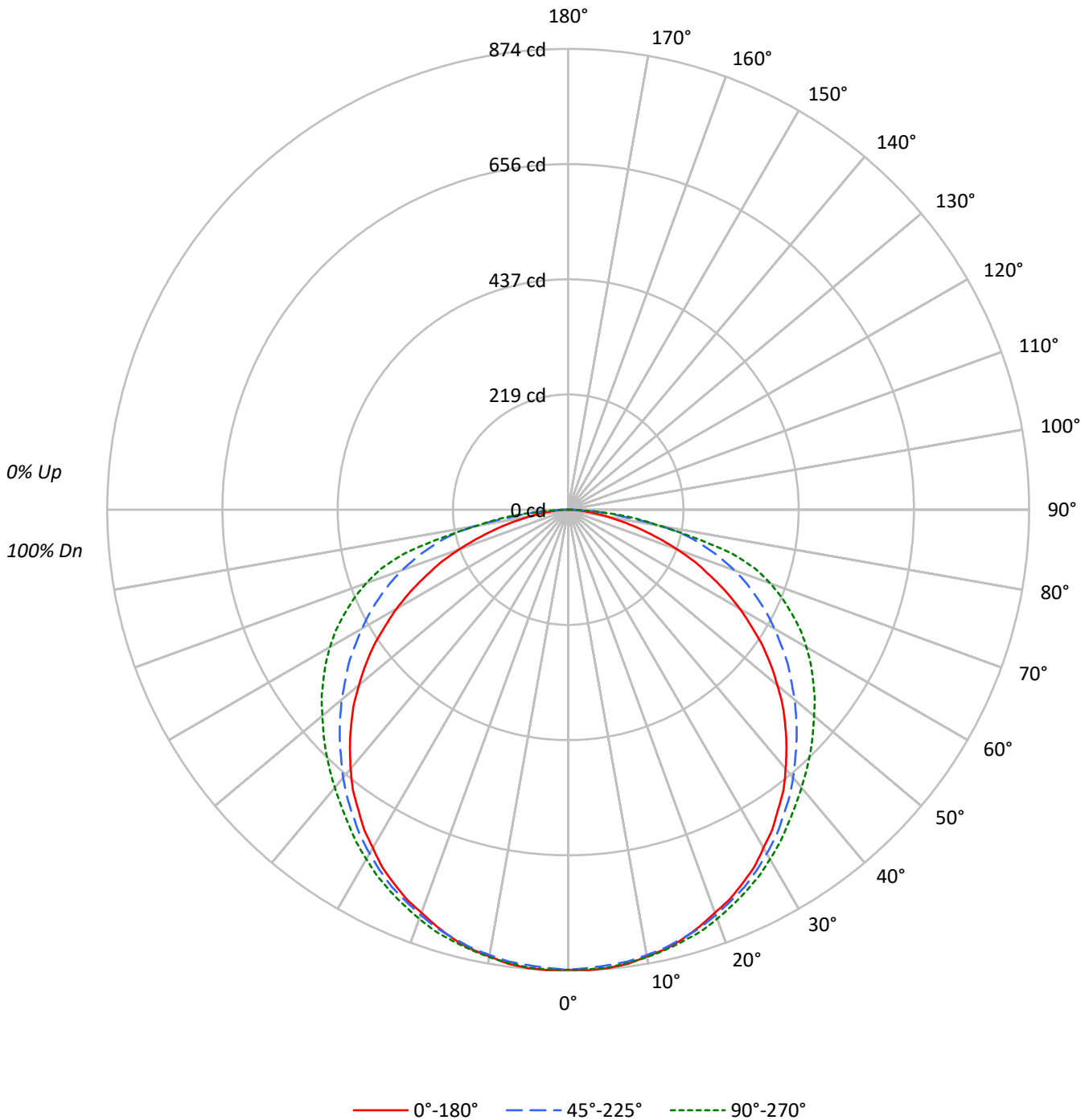
Input Watts (W): 32.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	68	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°	1174	1174	1174
5°	1179	1171	1177
10°	1175	1172	1177
15°	1173	1172	1179
20°	1165	1171	1183
25°	1161	1173	1185
30°	1151	1170	1189
35°	1140	1167	1194
40°	1127	1165	1209
45°	1108	1166	1236
50°	1083	1173	1274
55°	1056	1191	1330
60°	1011	1215	1404
65°	947	1258	1490
70°	861	1316	1603
75°	730	1388	1674
80°	576	1397	1354
85°	425	1062	1190



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.8	3.0
10°-20°	238.3	8.6
20°-30°	364.3	13.1
30°-40°	445.4	16.0
40°-50°	474.7	17.1
50°-60°	453.9	16.4
60°-70°	384.5	13.9
70°-80°	258.4	9.3
80°-90°	72.9	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°	685.4	24.7
0°-40°	1130.8	40.7
0°-60°	2059.4	74.2
0°-90°	2775.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2775.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	873	873	873	873	873	
5°	873	871	867	871	871	83
15°	842	842	841	848	847	238
25°	782	785	790	797	798	360
35°	694	699	710	724	727	435
45°	582	592	613	639	650	449
55°	450	467	508	548	567	401
65°	297	328	395	447	468	295
75°	140	191	267	312	322	150
85°	28	56	69	74	77	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	872.7	872.7	872.7	872.7	872.7
2.5°	874.1	874.1	870.0	872.7	872.7
5°	872.7	871.3	867.2	871.3	871.3
7.5°	868.6	867.2	864.5	868.6	867.2
10°	860.3	860.3	857.6	861.7	861.7
12.5°	853.4	852.1	850.7	856.2	854.8
15°	842.4	842.4	841.1	847.9	846.6
17.5°	828.7	830.0	831.4	836.9	838.3
20°	813.5	816.3	817.7	825.9	825.9
22.5°	799.8	801.1	803.9	812.2	812.2
25°	781.9	784.6	790.1	797.0	798.4
27.5°	764.0	765.4	772.2	781.9	783.2
30°	740.6	744.7	753.0	764.0	765.4
32.5°	719.9	724.1	733.7	744.7	747.5
35°	693.8	699.3	710.3	724.1	726.8
37.5°	670.4	674.5	688.3	703.4	707.5
40°	641.5	649.7	663.5	681.4	688.3
42.5°	612.6	620.8	637.3	660.7	669.0
45°	582.3	591.9	612.6	638.7	649.7
47.5°	552.0	563.0	586.4	616.7	629.1
50°	517.6	531.3	560.2	594.7	608.4
52.5°	484.5	501.1	532.7	571.3	589.2
55°	450.1	466.6	507.9	547.9	567.1
57.5°	411.6	433.6	479.0	524.5	545.1
60°	375.8	396.4	451.5	501.1	521.7
62.5°	337.3	364.8	424.0	476.3	496.9
65°	297.3	327.6	395.1	447.4	468.0
67.5°	261.5	294.6	366.2	418.5	439.1
70°	218.9	260.2	334.5	386.8	407.5
72.5°	178.9	224.4	301.5	352.4	371.7
75°	140.4	191.3	267.0	312.5	322.1
77.5°	104.6	158.3	231.3	250.5	243.6
80°	74.3	126.6	180.3	170.7	174.8
82.5°	48.2	96.4	111.5	126.6	130.8
85°	27.5	56.4	68.8	74.3	77.1
87.5°	12.4	20.6	27.5	27.5	26.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)