

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: P391249

Luminaire Tested: **24CZ2-30VHE-RDP-UNV-L935-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: P391249
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: 24CZ2-30VHE-RDP-UNV-L935-CD1-SWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1690.9 lumens
Efficiency: N/A
Efficacy: 82.9 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

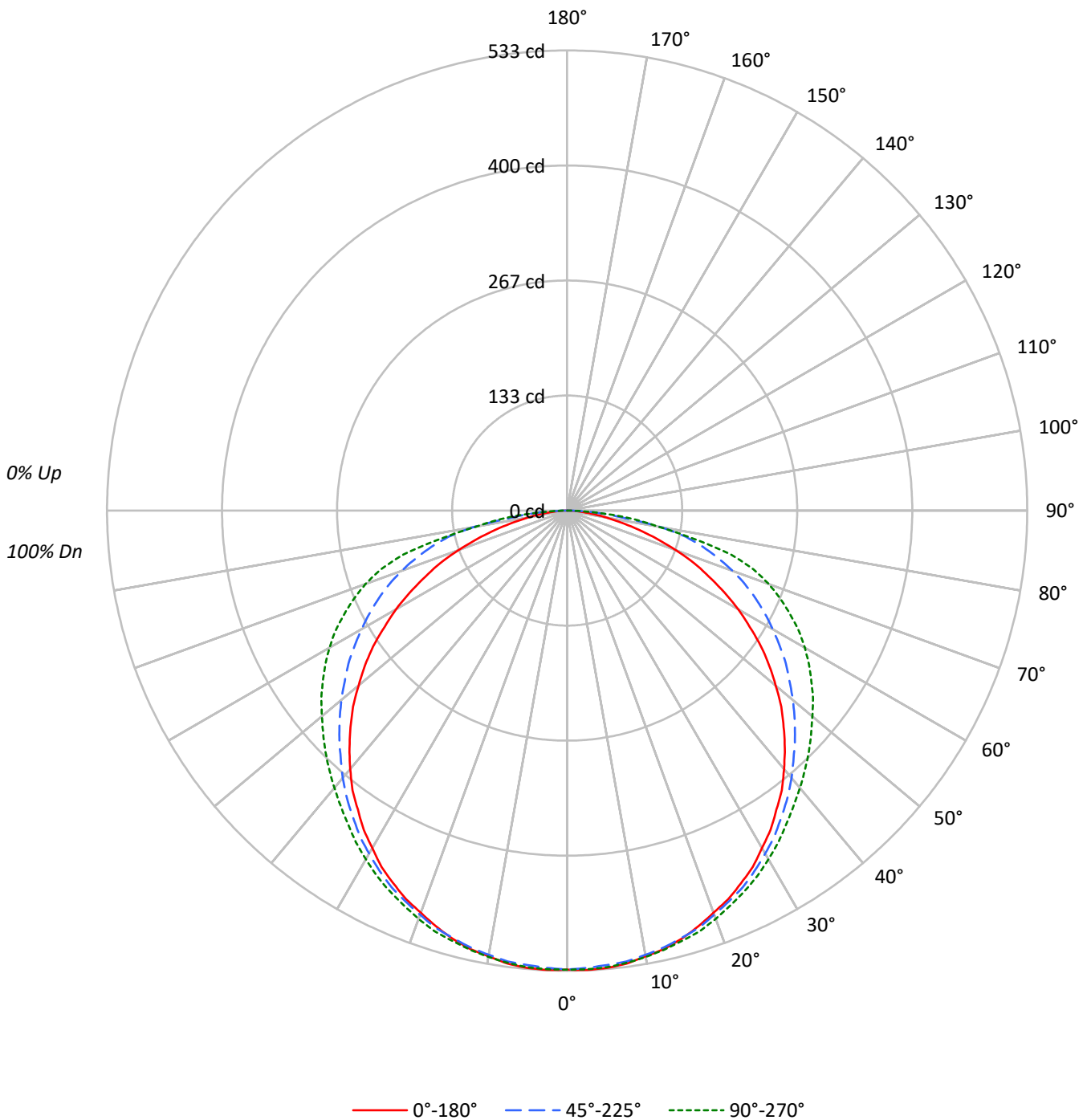
Input Watts (W): 20.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	715	715	715
5°	718	714	717
10°	716	714	717
15°	715	714	718
20°	710	713	721
25°	707	715	722
30°	701	713	724
35°	694	711	727
40°	686	710	737
45°	675	710	753
50°	660	715	776
55°	643	726	810
60°	616	740	855
65°	577	766	908
70°	525	802	977
75°	444	846	1020
80°	351	852	825
85°	259	647	726



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.4	3.0
10°-20°	145.2	8.6
20°-30°	222.0	13.1
30°-40°	271.4	16.0
40°-50°	289.2	17.1
50°-60°	276.6	16.4
60°-70°	234.3	13.9
70°-80°	157.5	9.3
80°-90°	44.4	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°	417.6	24.7
0°-40°	689.0	40.7
0°-60°	1254.8	74.2
0°-90°	1690.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1690.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	532	532	532	532	532	
5°	532	531	528	531	531	51
15°	513	513	512	517	516	145
25°	476	478	481	486	486	220
35°	423	426	433	441	443	265
45°	355	361	373	389	396	274
55°	274	284	310	334	346	244
65°	181	200	241	273	285	180
75°	86	117	163	190	196	92
85°	17	34	42	45	47	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	531.7	531.7	531.7	531.7	531.7
2.5°	532.6	532.6	530.1	531.7	531.7
5°	531.7	530.9	528.4	530.9	530.9
7.5°	529.2	528.4	526.7	529.2	528.4
10°	524.2	524.2	522.5	525.0	525.0
12.5°	520.0	519.2	518.3	521.7	520.8
15°	513.3	513.3	512.4	516.6	515.8
17.5°	504.9	505.7	506.6	509.9	510.8
20°	495.7	497.4	498.2	503.2	503.2
22.5°	487.3	488.1	489.8	494.8	494.8
25°	476.4	478.1	481.4	485.6	486.4
27.5°	465.5	466.3	470.5	476.4	477.2
30°	451.2	453.7	458.8	465.5	466.3
32.5°	438.6	441.2	447.0	453.7	455.4
35°	422.7	426.1	432.8	441.2	442.8
37.5°	408.4	411.0	419.4	428.6	431.1
40°	390.8	395.9	404.3	415.2	419.4
42.5°	373.2	378.3	388.3	402.6	407.6
45°	354.8	360.6	373.2	389.2	395.9
47.5°	336.3	343.0	357.3	375.7	383.3
50°	315.4	323.7	341.4	362.3	370.7
52.5°	295.2	305.3	324.6	348.1	359.0
55°	274.3	284.3	309.5	333.8	345.5
57.5°	250.8	264.2	291.9	319.5	332.1
60°	229.0	241.5	275.1	305.3	317.9
62.5°	205.5	222.3	258.3	290.2	302.8
65°	181.2	199.6	240.7	272.6	285.2
67.5°	159.4	179.5	223.1	255.0	267.5
70°	133.4	158.5	203.8	235.7	248.3
72.5°	109.0	136.7	183.7	214.7	226.5
75°	85.5	116.6	162.7	190.4	196.3
77.5°	63.7	96.5	140.9	152.6	148.5
80°	45.3	77.2	109.9	104.0	106.5
82.5°	29.4	58.7	67.9	77.2	79.7
85°	16.8	34.4	41.9	45.3	47.0
87.5°	7.5	12.6	16.8	16.8	15.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)