

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: P391256

Luminaire Tested: **24CZ2-30VHE-RDP-UNV-L950-CD1-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: P391256
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-L950-CD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1836.2 lumens
Efficiency: N/A
Efficacy: 90.0 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

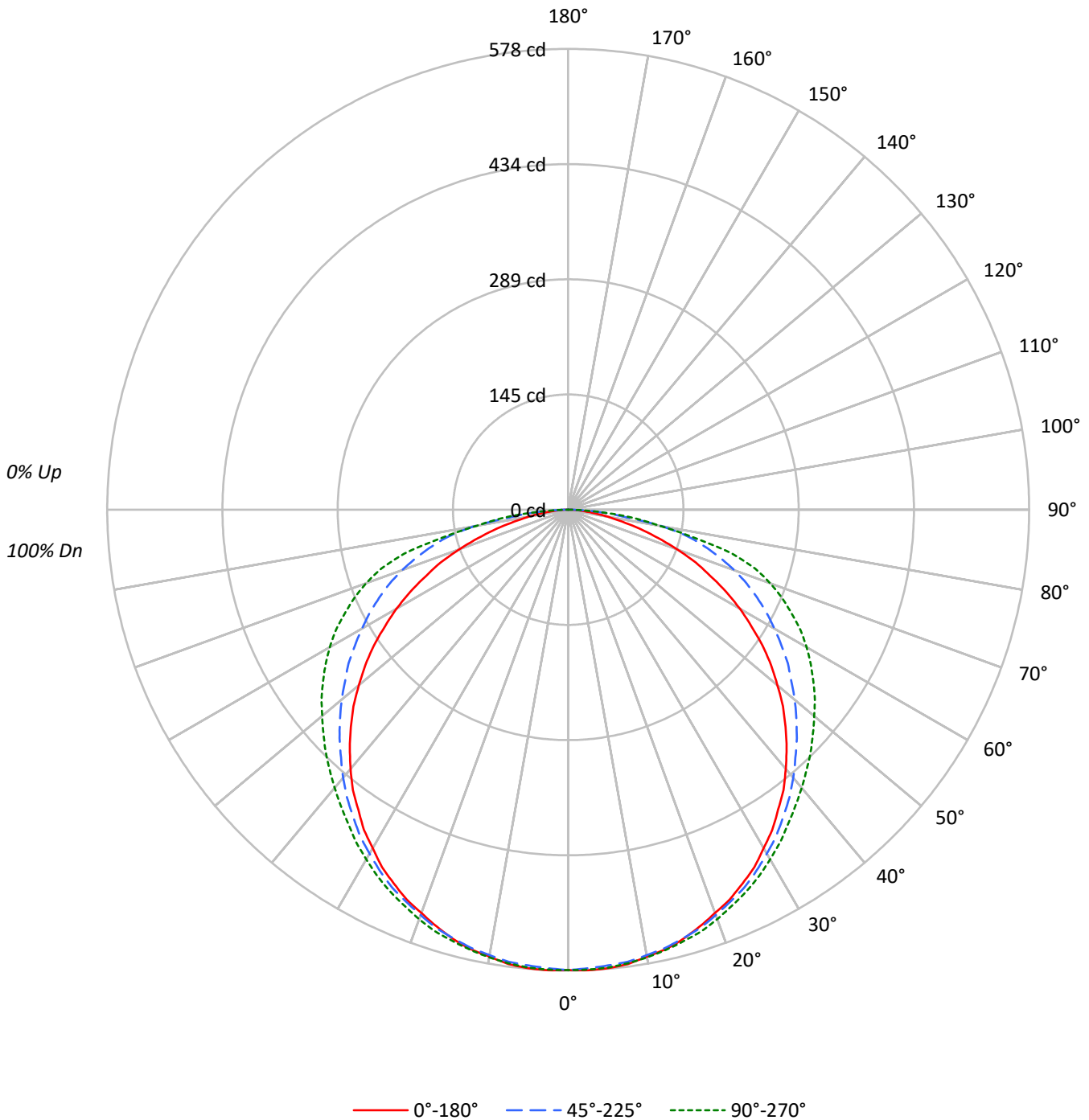
Input Watts (W): 20.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	777	777	777
5°	780	775	779
10°	778	775	779
15°	776	775	780
20°	771	775	783
25°	768	776	784
30°	761	774	787
35°	754	772	790
40°	745	771	800
45°	733	771	818
50°	717	776	843
55°	699	788	880
60°	669	804	929
65°	626	832	986
70°	570	871	1061
75°	483	919	1108
80°	381	924	896
85°	281	702	787



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.8	3.0
10°-20°	157.6	8.6
20°-30°	241.1	13.1
30°-40°	294.7	16.0
40°-50°	314.1	17.1
50°-60°	300.3	16.4
60°-70°	254.4	13.9
70°-80°	171.0	9.3
80°-90°	48.2	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°	453.5	24.7
0°-40°	748.2	40.7
0°-60°	1362.6	74.2
0°-90°	1836.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1836.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	577	577	577	577	577	
5°	577	576	574	576	576	55
15°	557	557	556	561	560	157
25°	517	519	523	527	528	238
35°	459	463	470	479	481	288
45°	385	392	405	423	430	297
55°	298	309	336	362	375	265
65°	197	217	261	296	310	195
75°	93	127	177	207	213	99
85°	18	37	46	49	51	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	577.4	577.4	577.4	577.4	577.4
2.5°	578.3	578.3	575.6	577.4	577.4
5°	577.4	576.5	573.8	576.5	576.5
7.5°	574.7	573.8	572.0	574.7	573.8
10°	569.2	569.2	567.4	570.1	570.1
12.5°	564.7	563.8	562.9	566.5	565.6
15°	557.4	557.4	556.5	561.0	560.1
17.5°	548.3	549.2	550.1	553.8	554.7
20°	538.3	540.1	541.0	546.5	546.5
22.5°	529.2	530.1	531.9	537.4	537.4
25°	517.3	519.1	522.8	527.3	528.3
27.5°	505.5	506.4	510.9	517.3	518.2
30°	490.0	492.7	498.2	505.5	506.4
32.5°	476.3	479.1	485.4	492.7	494.6
35°	459.0	462.7	470.0	479.1	480.9
37.5°	443.5	446.3	455.4	465.4	468.1
40°	424.4	429.9	439.0	450.8	455.4
42.5°	405.3	410.8	421.7	437.2	442.6
45°	385.3	391.6	405.3	422.6	429.9
47.5°	365.2	372.5	388.0	408.0	416.2
50°	342.5	351.6	370.7	393.5	402.6
52.5°	320.6	331.5	352.5	378.0	389.8
55°	297.8	308.8	336.1	362.5	375.2
57.5°	272.3	286.9	317.0	347.0	360.7
60°	248.6	262.3	298.7	331.5	345.2
62.5°	223.1	241.4	280.5	315.1	328.8
65°	196.7	216.8	261.4	296.0	309.7
67.5°	173.0	194.9	242.3	276.9	290.5
70°	144.8	172.1	221.3	255.9	269.6
72.5°	118.4	148.5	199.5	233.2	245.9
75°	92.9	126.6	176.7	206.7	213.1
77.5°	69.2	104.7	153.0	165.8	161.2
80°	49.2	83.8	119.3	112.9	115.7
82.5°	31.9	63.8	73.8	83.8	86.5
85°	18.2	37.3	45.5	49.2	51.0
87.5°	8.2	13.7	18.2	18.2	17.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)