

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: P391250

Luminaire Tested: **24CZ2-30VHE-RDP-UNV-L935-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: P391250
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-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: 1712.2 lumens
Efficiency: N/A
Efficacy: 83.9 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

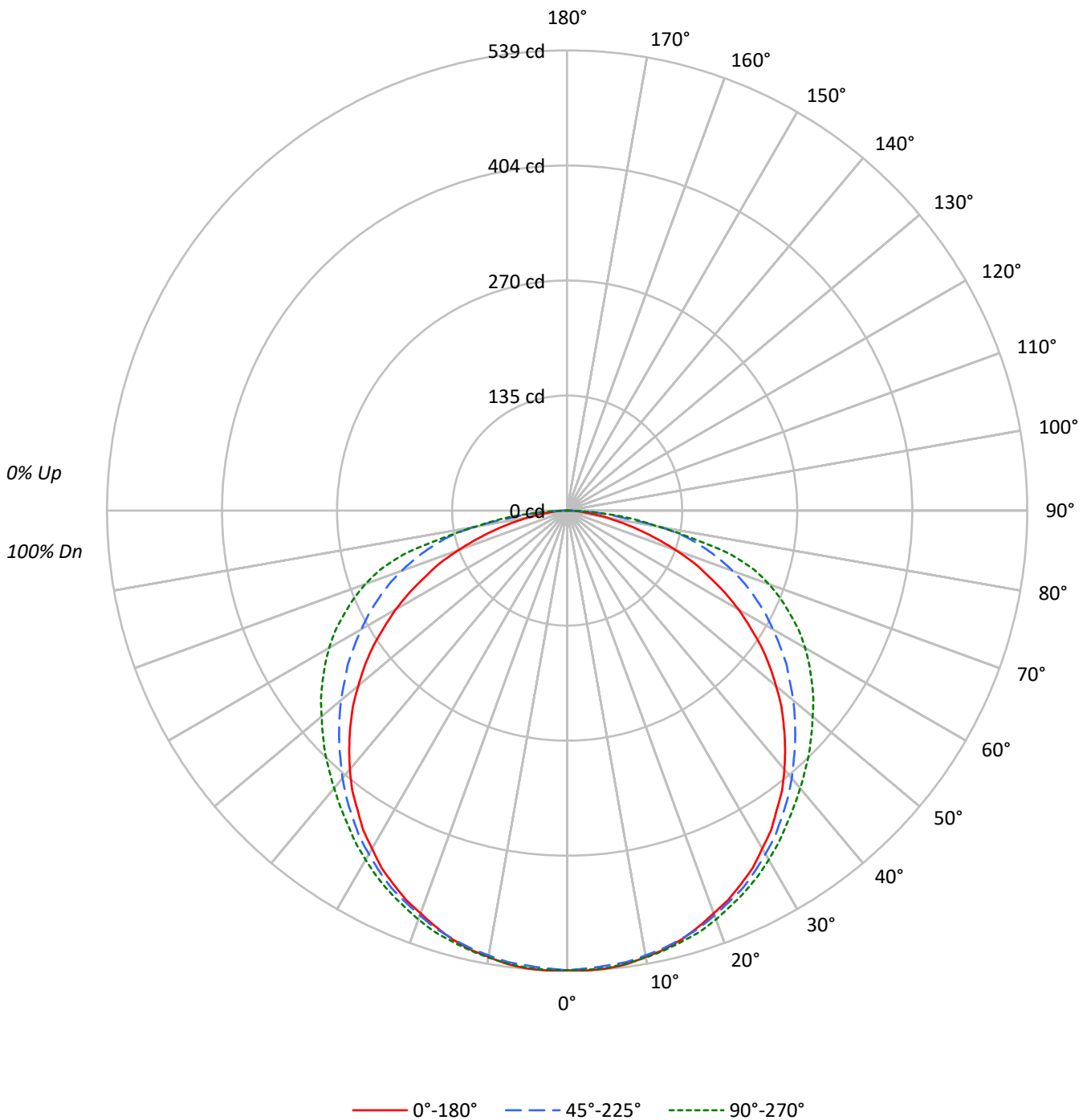
Input Watts (W): 20.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	724	724	724
5°	727	723	726
10°	725	723	726
15°	724	723	728
20°	719	722	730
25°	716	724	731
30°	710	722	734
35°	703	720	737
40°	695	719	746
45°	683	719	763
50°	668	724	786
55°	651	735	821
60°	624	750	866
65°	584	776	919
70°	531	812	989
75°	450	857	1033
80°	356	862	836
85°	262	656	735



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.1	3.0
10°-20°	147.0	8.6
20°-30°	224.8	13.1
30°-40°	274.8	16.0
40°-50°	292.9	17.1
50°-60°	280.0	16.4
60°-70°	237.2	13.9
70°-80°	159.4	9.3
80°-90°	45.0	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°	422.9	24.7
0°-40°	697.7	40.7
0°-60°	1270.6	74.2
0°-90°	1712.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1712.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	538	538	538	538	538	
5°	538	538	535	538	538	51
15°	520	520	519	523	522	147
25°	482	484	488	492	493	222
35°	428	431	438	447	448	268
45°	359	365	378	394	401	277
55°	278	288	313	338	350	247
65°	183	202	244	276	289	182
75°	87	118	165	193	199	93
85°	17	35	42	46	48	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	538.4	538.4	538.4	538.4	538.4
2.5°	539.3	539.3	536.7	538.4	538.4
5°	538.4	537.6	535.0	537.6	537.6
7.5°	535.9	535.0	533.3	535.9	535.0
10°	530.8	530.8	529.1	531.6	531.6
12.5°	526.5	525.7	524.8	528.2	527.4
15°	519.8	519.8	518.9	523.2	522.3
17.5°	511.3	512.1	513.0	516.4	517.2
20°	501.9	503.6	504.5	509.6	509.6
22.5°	493.4	494.3	496.0	501.1	501.1
25°	482.4	484.1	487.5	491.7	492.6
27.5°	471.3	472.2	476.4	482.4	483.2
30°	456.9	459.5	464.6	471.3	472.2
32.5°	444.2	446.7	452.7	459.5	461.2
35°	428.0	431.4	438.2	446.7	448.4
37.5°	413.6	416.1	424.6	434.0	436.5
40°	395.8	400.9	409.3	420.4	424.6
42.5°	377.9	383.0	393.2	407.7	412.7
45°	359.2	365.2	377.9	394.1	400.9
47.5°	340.6	347.4	361.8	380.5	388.1
50°	319.3	327.8	345.7	366.9	375.4
52.5°	298.9	309.1	328.7	352.4	363.5
55°	277.7	287.9	313.4	338.0	349.9
57.5°	253.9	267.5	295.5	323.6	336.3
60°	231.9	244.6	278.6	309.1	321.9
62.5°	208.1	225.1	261.6	293.8	306.6
65°	183.4	202.1	243.7	276.0	288.8
67.5°	161.4	181.7	225.9	258.2	270.9
70°	135.0	160.5	206.4	238.6	251.4
72.5°	110.4	138.4	186.0	217.4	229.3
75°	86.6	118.0	164.8	192.8	198.7
77.5°	64.5	97.7	142.7	154.6	150.3
80°	45.9	78.1	111.3	105.3	107.9
82.5°	29.7	59.4	68.8	78.1	80.7
85°	17.0	34.8	42.5	45.9	47.6
87.5°	7.6	12.7	17.0	17.0	16.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)