

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: P391255

Luminaire Tested: **24CZ2-30VHE-RDP-UNV-L950-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: P391255
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-SWPD1-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: 1813.4 lumens
Efficiency: N/A
Efficacy: 88.9 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

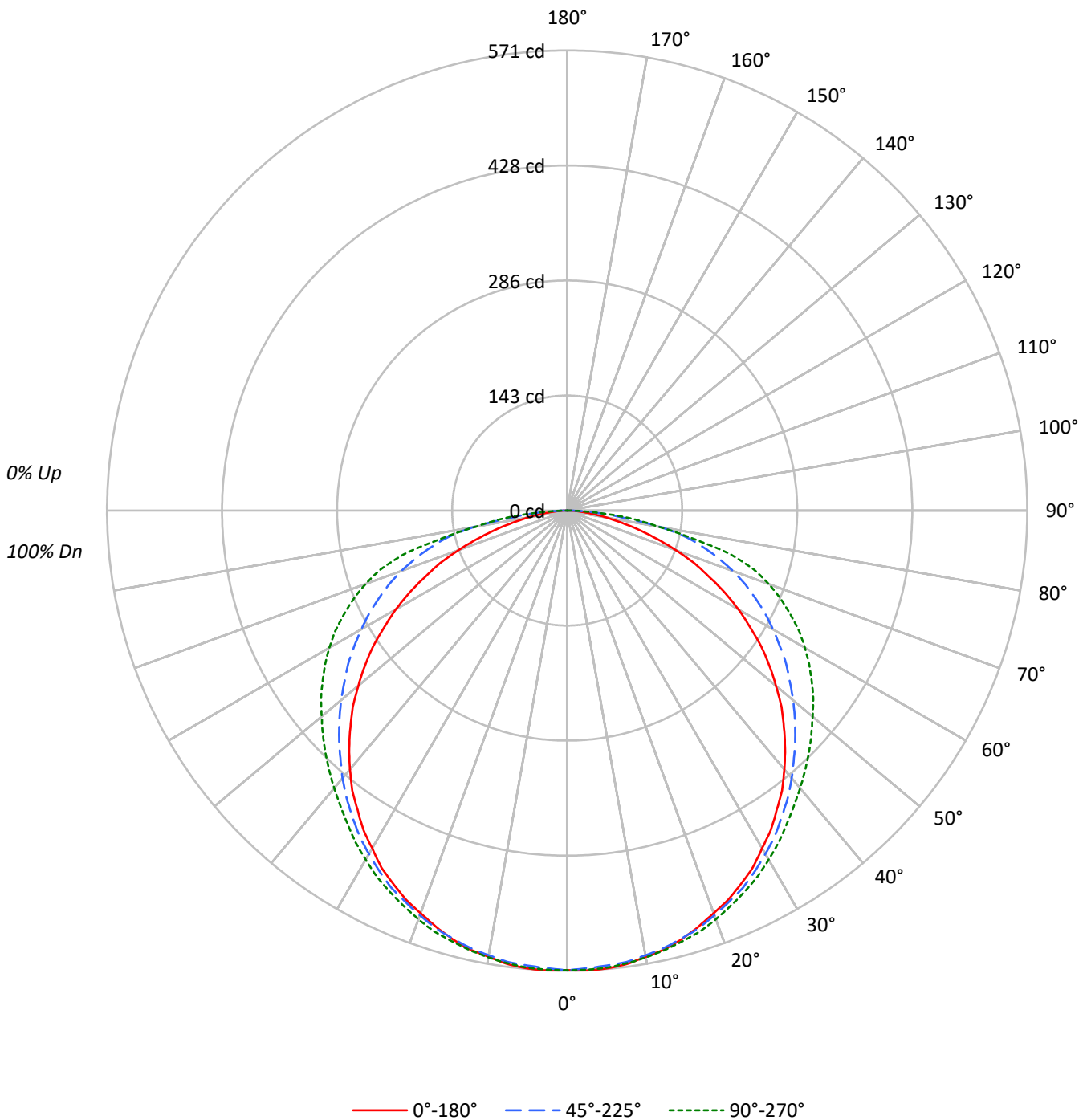
Input Watts (W): 20.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	767	767	767
5°	770	765	769
10°	768	766	769
15°	767	766	771
20°	761	765	773
25°	758	766	775
30°	752	764	777
35°	745	762	780
40°	736	761	790
45°	724	762	808
50°	708	766	832
55°	690	779	869
60°	661	794	917
65°	619	822	974
70°	563	860	1047
75°	477	907	1094
80°	377	913	885
85°	278	695	778



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.1	3.0
10°-20°	155.7	8.6
20°-30°	238.1	13.1
30°-40°	291.0	16.0
40°-50°	310.2	17.1
50°-60°	296.6	16.4
60°-70°	251.2	13.9
70°-80°	168.9	9.3
80°-90°	47.6	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°	447.9	24.7
0°-40°	738.9	40.7
0°-60°	1345.7	74.2
0°-90°	1813.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1813.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	570	570	570	570	570	
5°	570	569	567	569	569	54
15°	550	550	550	554	553	155
25°	511	513	516	521	522	235
35°	453	457	464	473	475	284
45°	380	387	400	417	424	293
55°	294	305	332	358	371	262
65°	194	214	258	292	306	193
75°	92	125	174	204	210	98
85°	18	37	45	49	50	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	570.3	570.3	570.3	570.3	570.3
2.5°	571.2	571.2	568.5	570.3	570.3
5°	570.3	569.4	566.7	569.4	569.4
7.5°	567.6	566.7	564.9	567.6	566.7
10°	562.2	562.2	560.4	563.1	563.1
12.5°	557.7	556.8	555.9	559.5	558.6
15°	550.5	550.5	549.6	554.1	553.2
17.5°	541.5	542.4	543.3	546.9	547.8
20°	531.6	533.4	534.3	539.7	539.7
22.5°	522.6	523.5	525.3	530.7	530.7
25°	510.9	512.7	516.3	520.8	521.7
27.5°	499.2	500.1	504.6	510.9	511.8
30°	483.9	486.6	492.0	499.2	500.1
32.5°	470.4	473.1	479.4	486.6	488.4
35°	453.3	456.9	464.1	473.1	474.9
37.5°	438.0	440.7	449.7	459.6	462.3
40°	419.2	424.5	433.5	445.2	449.7
42.5°	400.3	405.7	416.5	431.7	437.1
45°	380.5	386.8	400.3	417.4	424.5
47.5°	360.7	367.9	383.2	403.0	411.1
50°	338.2	347.2	366.1	388.6	397.6
52.5°	316.6	327.4	348.1	373.3	385.0
55°	294.1	304.9	331.9	358.0	370.6
57.5°	268.9	283.3	313.0	342.7	356.2
60°	245.6	259.0	295.0	327.4	340.9
62.5°	220.4	238.4	277.0	311.2	324.7
65°	194.3	214.1	258.1	292.3	305.8
67.5°	170.9	192.5	239.3	273.4	286.9
70°	143.0	170.0	218.6	252.8	266.2
72.5°	116.9	146.6	197.0	230.3	242.9
75°	91.7	125.0	174.5	204.2	210.5
77.5°	68.4	103.4	151.1	163.7	159.2
80°	48.6	82.8	117.8	111.5	114.2
82.5°	31.5	63.0	72.9	82.8	85.4
85°	18.0	36.9	45.0	48.6	50.4
87.5°	8.1	13.5	18.0	18.0	17.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)