

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: P391293

Luminaire Tested: **24CZ2-35VHE-RDP-UNV-L930-CD1-SDWPD1-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: P391293
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: 24CZ2-35VHE-RDP-UNV-L930-CD1-SDWPD1-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: 1909.0 lumens
Efficiency: N/A
Efficacy: 83.7 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

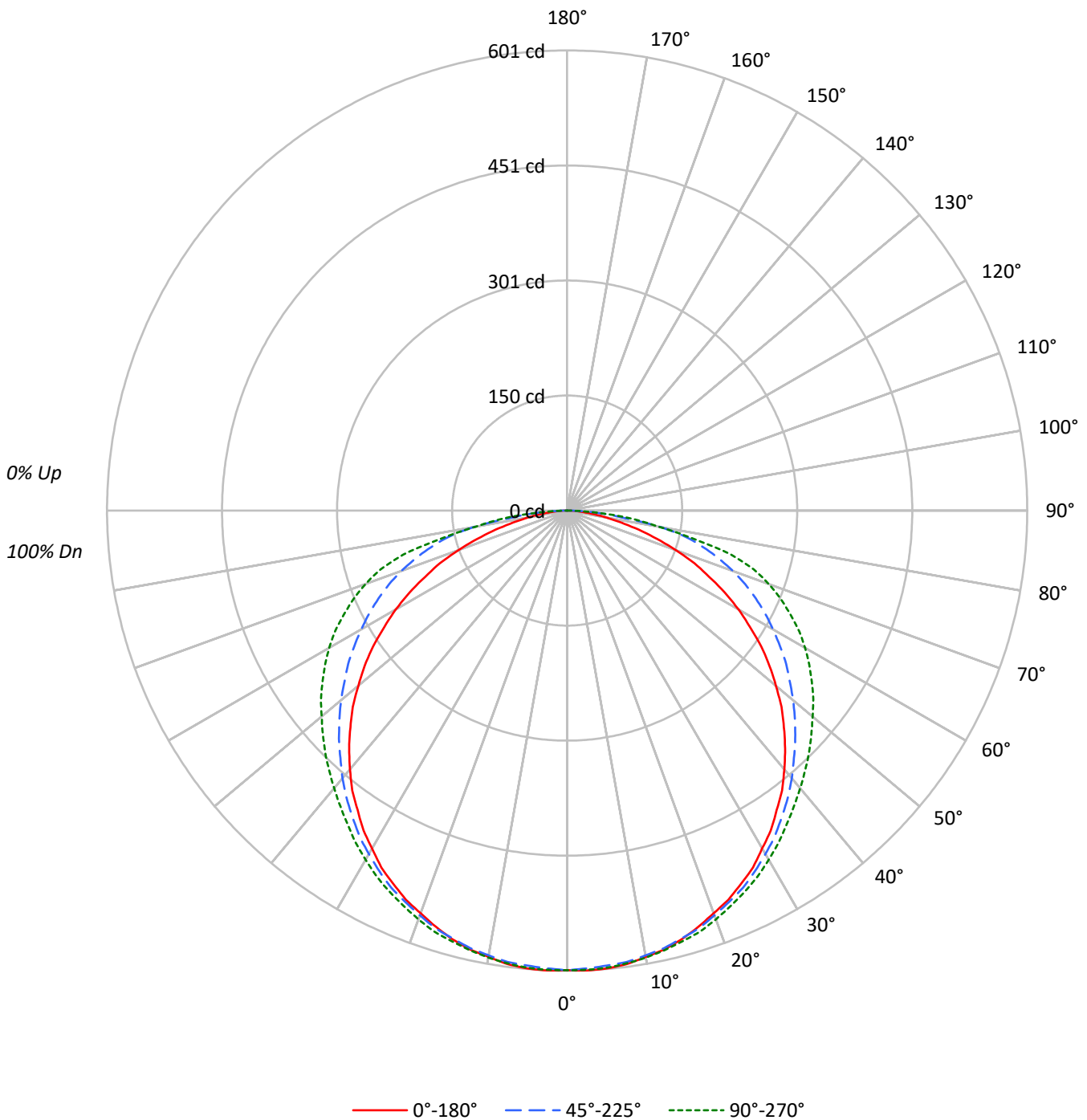
Input Watts (W): 22.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82					82			
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67					67			
3	88	77	68	62	86	76	68	61	72	66	60	70	64	59	67	62	58	56					56			
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47					47			
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40					40			
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35					35			
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31					31			
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27					27			
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24					24			
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22					22			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	808	808	808
5°	811	806	810
10°	809	806	810
15°	807	806	811
20°	801	805	813
25°	798	807	815
30°	791	805	818
35°	784	803	821
40°	775	802	831
45°	762	802	850
50°	745	807	876
55°	726	820	915
60°	696	836	966
65°	651	865	1025
70°	592	905	1103
75°	502	955	1152
80°	396	961	932
85°	292	730	818



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.9	3.0
10°-20°	163.9	8.6
20°-30°	250.6	13.1
30°-40°	306.4	16.0
40°-50°	326.5	17.1
50°-60°	312.2	16.4
60°-70°	264.5	13.9
70°-80°	177.8	9.3
80°-90°	50.1	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°	471.5	24.7
0°-40°	777.8	40.7
0°-60°	1416.6	74.2
0°-90°	1909.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1909.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	600	600	600	600	600	
5°	600	599	596	599	599	57
15°	580	580	578	583	582	163
25°	538	540	544	548	549	248
35°	477	481	489	498	500	299
45°	400	407	421	439	447	309
55°	310	321	349	377	390	276
65°	204	225	272	308	322	203
75°	97	132	184	215	222	103
85°	19	39	47	51	53	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	600.3	600.3	600.3	600.3	600.3
2.5°	601.3	601.3	598.4	600.3	600.3
5°	600.3	599.4	596.5	599.4	599.4
7.5°	597.5	596.5	594.6	597.5	596.5
10°	591.8	591.8	589.9	592.8	592.8
12.5°	587.1	586.1	585.2	589.0	588.0
15°	579.5	579.5	578.5	583.3	582.3
17.5°	570.0	571.0	571.9	575.7	576.7
20°	559.6	561.5	562.5	568.1	568.1
22.5°	550.1	551.1	553.0	558.7	558.7
25°	537.8	539.7	543.5	548.2	549.2
27.5°	525.5	526.5	531.2	537.8	538.8
30°	509.4	512.3	517.9	525.5	526.5
32.5°	495.2	498.1	504.7	512.3	514.2
35°	477.2	481.0	488.6	498.1	500.0
37.5°	461.1	464.0	473.4	483.9	486.7
40°	441.2	446.9	456.4	468.7	473.4
42.5°	421.4	427.0	438.4	454.5	460.2
45°	400.5	407.2	421.4	439.4	446.9
47.5°	379.7	387.3	403.4	424.2	432.7
50°	356.0	365.5	385.4	409.1	418.5
52.5°	333.3	344.7	366.4	393.0	405.3
55°	309.6	321.0	349.4	376.9	390.1
57.5°	283.1	298.3	329.5	360.8	375.0
60°	258.5	272.7	310.6	344.7	358.9
62.5°	232.0	250.9	291.6	327.6	341.8
65°	204.5	225.4	271.8	307.7	321.9
67.5°	179.9	202.6	251.9	287.9	302.1
70°	150.6	179.0	230.1	266.1	280.3
72.5°	123.1	154.3	207.4	242.4	255.7
75°	96.6	131.6	183.7	214.9	221.6
77.5°	72.0	108.9	159.1	172.3	167.6
80°	51.1	87.1	124.0	117.4	120.3
82.5°	33.1	66.3	76.7	87.1	90.0
85°	18.9	38.8	47.3	51.1	53.0
87.5°	8.5	14.2	18.9	18.9	18.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)