

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: P391297

Luminaire Tested: **24CZ2-35VHE-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: P391297
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-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: 1980.1 lumens
Efficiency: N/A
Efficacy: 86.8 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

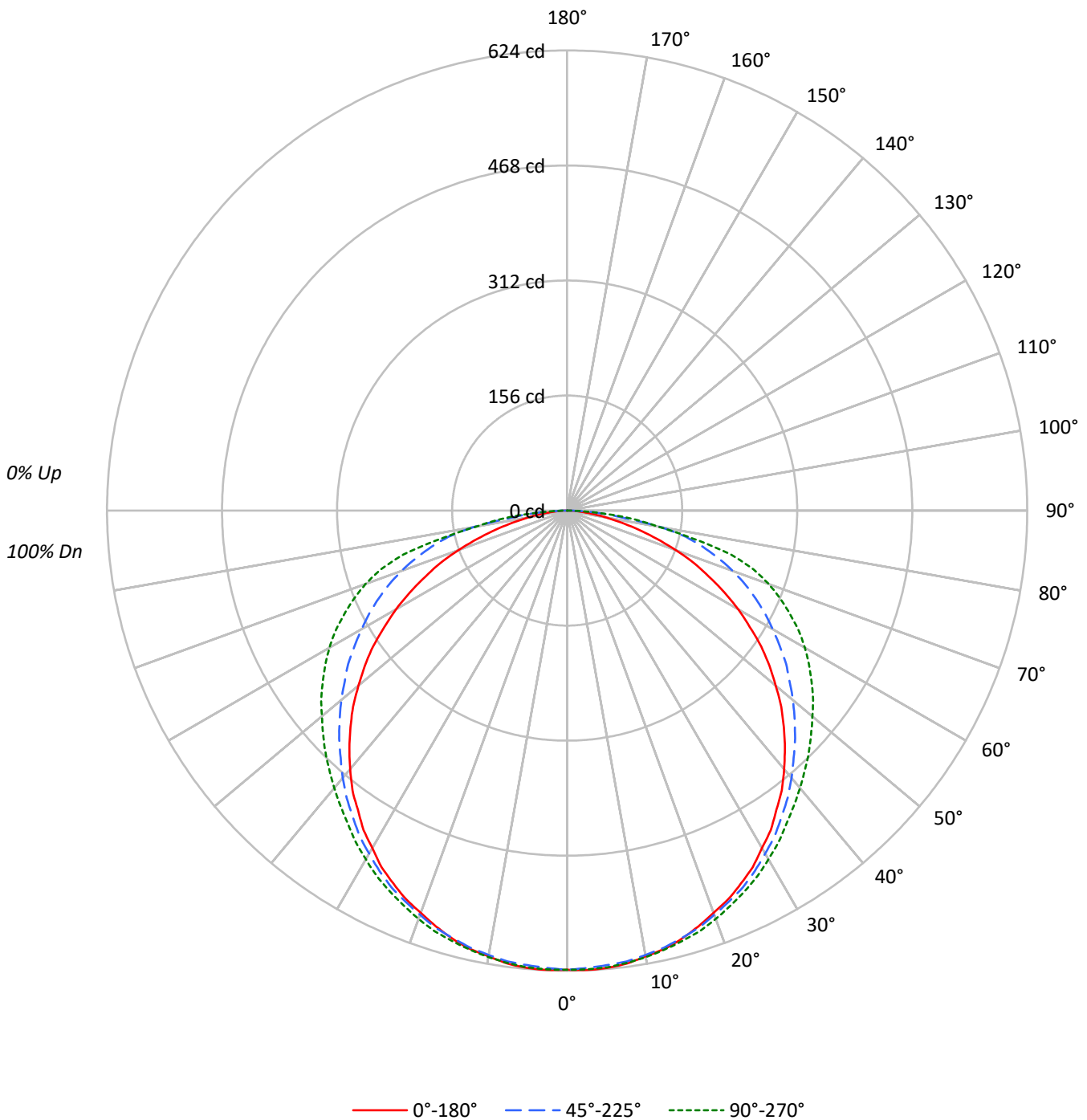
Input Watts (W): 22.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	838	838	838
5°	841	836	840
10°	839	836	840
15°	837	836	841
20°	831	835	844
25°	828	837	846
30°	821	835	848
35°	813	832	852
40°	804	831	863
45°	791	832	882
50°	773	837	909
55°	753	850	949
60°	721	867	1002
65°	675	897	1063
70°	614	939	1144
75°	521	990	1195
80°	411	997	966
85°	303	758	849



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.1	3.0
10°-20°	170.0	8.6
20°-30°	260.0	13.1
30°-40°	317.8	16.0
40°-50°	338.7	17.1
50°-60°	323.8	16.4
60°-70°	274.3	13.9
70°-80°	184.4	9.3
80°-90°	52.0	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°	489.0	24.7
0°-40°	806.8	40.7
0°-60°	1469.4	74.2
0°-90°	1980.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1980.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	623	623	623	623	623	
5°	623	622	619	622	622	59
15°	601	601	600	605	604	169
25°	558	560	564	569	570	257
35°	495	499	507	517	519	310
45°	416	422	437	456	464	320
55°	321	333	362	391	405	286
65°	212	234	282	319	334	211
75°	100	136	190	223	230	107
85°	20	40	49	53	55	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	622.7	622.7	622.7	622.7	622.7
2.5°	623.7	623.7	620.7	622.7	622.7
5°	622.7	621.7	618.8	621.7	621.7
7.5°	619.7	618.8	616.8	619.7	618.8
10°	613.8	613.8	611.9	614.8	614.8
12.5°	608.9	608.0	607.0	610.9	609.9
15°	601.1	601.1	600.1	605.0	604.0
17.5°	591.3	592.2	593.2	597.1	598.1
20°	580.5	582.4	583.4	589.3	589.3
22.5°	570.6	571.6	573.6	579.5	579.5
25°	557.9	559.8	563.8	568.7	569.6
27.5°	545.1	546.1	551.0	557.9	558.8
30°	528.4	531.3	537.2	545.1	546.1
32.5°	513.7	516.6	523.5	531.3	533.3
35°	495.0	498.9	506.8	516.6	518.6
37.5°	478.3	481.3	491.1	501.9	504.8
40°	457.7	463.6	473.4	486.2	491.1
42.5°	437.1	443.0	454.7	471.4	477.3
45°	415.5	422.3	437.1	455.7	463.6
47.5°	393.8	401.7	418.4	440.0	448.8
50°	369.3	379.1	399.7	424.3	434.1
52.5°	345.7	357.5	380.1	407.6	420.4
55°	321.2	332.9	362.4	390.9	404.6
57.5°	293.7	309.4	341.8	374.2	388.9
60°	268.1	282.9	322.1	357.5	372.2
62.5°	240.6	260.3	302.5	339.8	354.6
65°	212.1	233.8	281.9	319.2	333.9
67.5°	186.6	210.2	261.3	298.6	313.3
70°	156.2	185.6	238.7	276.0	290.7
72.5°	127.7	160.1	215.1	251.4	265.2
75°	100.2	136.5	190.5	222.9	229.8
77.5°	74.6	112.9	165.0	178.8	173.8
80°	53.0	90.4	128.7	121.8	124.7
82.5°	34.4	68.8	79.6	90.4	93.3
85°	19.6	40.3	49.1	53.0	55.0
87.5°	8.8	14.7	19.6	19.6	18.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)