

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: P388754

Luminaire Tested: **24CZ2-30VHE-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: P388754
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-30VHE-UNV-L935-CD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

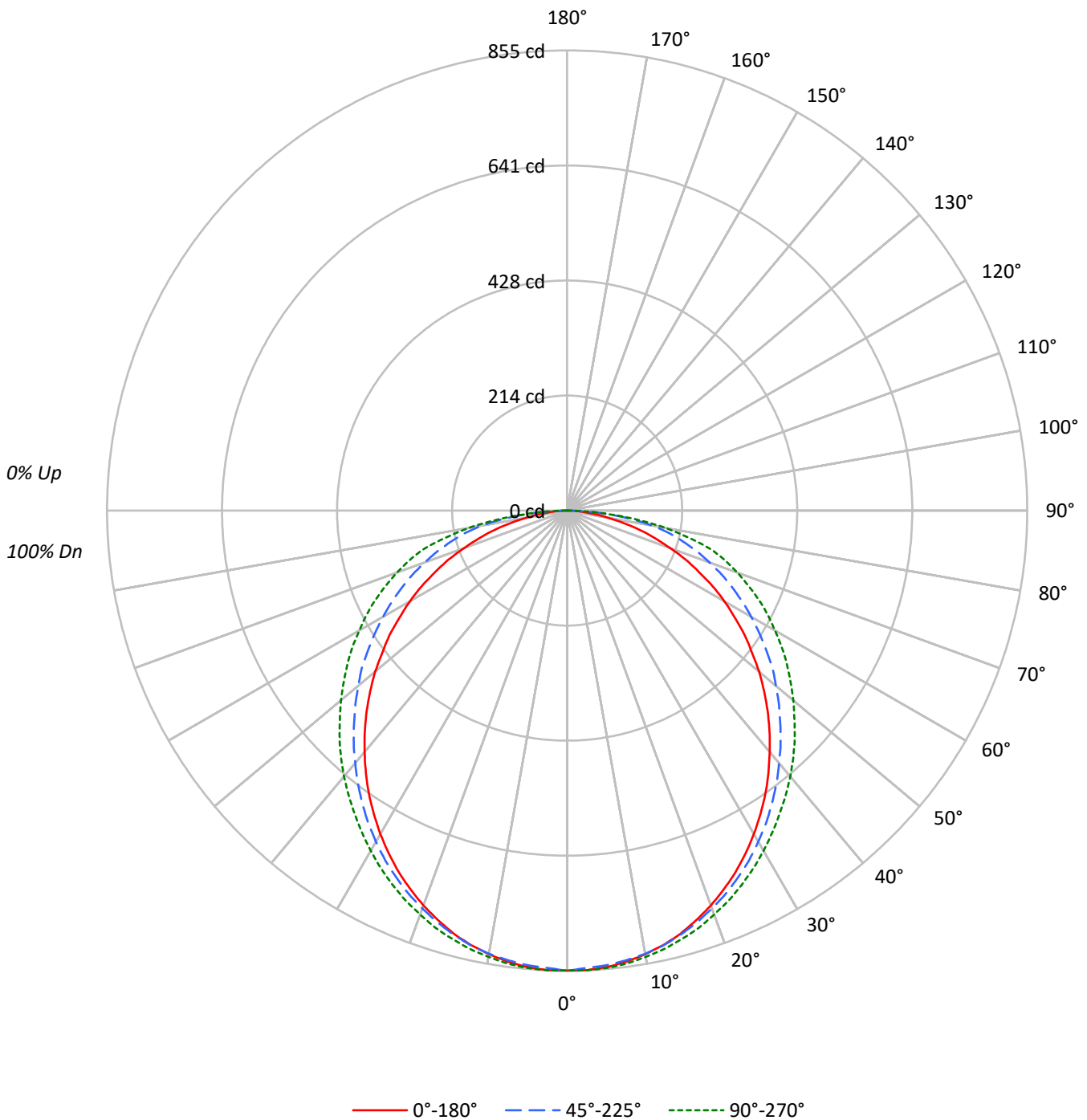
Lumens per Lamp: N/A
Luminaire Lumens: 2545.7 lumens
Efficiency: N/A
Efficacy: 124.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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		89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73		80	75	71		77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61		70	64	60		68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51		62	56	51		60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44		56	49	44		54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39		50	44	38		49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34		46	39	34		45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30		42	35	30		41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27		39	32	27		38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25		36	29	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1150	1150	1150
5°	1150	1145	1152
10°	1143	1142	1150
15°	1134	1136	1148
20°	1118	1126	1143
25°	1100	1116	1139
30°	1078	1104	1134
35°	1055	1090	1130
40°	1028	1076	1133
45°	1002	1065	1138
50°	975	1060	1149
55°	945	1058	1170
60°	908	1063	1200
65°	860	1079	1252
70°	799	1106	1323
75°	729	1161	1435
80°	599	1251	1435
85°	459	1155	1233



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.8	3.2
10°-20°	230.8	9.1
20°-30°	347.3	13.6
30°-40°	416.2	16.3
40°-50°	433.7	17.0
50°-60°	403.5	15.9
60°-70°	332.3	13.1
70°-80°	226.3	8.9
80°-90°	74.7	2.9
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°	658.9	25.9
0°-40°	1075.1	42.2
0°-60°	1912.3	75.1
0°-90°	2545.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2545.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	855	855	855	855	855	
5°	851	851	848	852	853	81
15°	814	815	816	823	824	229
25°	741	744	752	765	767	341
35°	642	650	664	681	688	401
45°	527	538	560	588	598	406
55°	403	416	451	487	499	359
65°	270	293	339	379	393	268
75°	140	172	223	263	276	148
85°	30	58	75	80	80	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	854.7	854.7	854.7	854.7	854.7
2.5°	854.7	854.7	850.5	854.7	854.7
5°	851.3	851.3	847.9	852.2	853.0
7.5°	845.4	846.2	842.8	847.9	848.8
10°	836.9	837.7	836.0	841.1	842.0
12.5°	826.7	827.5	827.5	833.5	834.3
15°	813.9	814.8	815.6	823.3	824.1
17.5°	797.8	800.3	802.0	811.4	813.1
20°	780.8	783.3	786.7	796.9	798.6
22.5°	761.3	764.7	770.6	781.6	784.2
25°	740.9	744.3	751.9	764.7	767.2
27.5°	717.9	723.0	732.4	746.0	749.4
30°	694.1	699.2	710.3	724.7	729.8
32.5°	668.6	675.4	688.2	704.3	709.4
35°	642.3	650.0	663.5	681.4	688.2
37.5°	614.3	622.8	638.9	658.4	666.9
40°	585.4	595.6	612.6	635.5	644.9
42.5°	556.5	565.8	587.1	611.7	621.9
45°	526.8	537.8	559.9	587.9	598.1
47.5°	496.2	507.2	533.6	563.3	572.6
50°	465.6	476.6	506.4	537.8	548.8
52.5°	432.5	446.9	480.9	512.3	523.4
55°	402.7	416.3	451.1	486.8	498.7
57.5°	368.7	384.9	423.1	460.5	473.2
60°	337.3	354.3	395.1	433.3	446.0
62.5°	305.0	323.7	367.0	406.1	420.6
65°	270.2	293.1	339.0	378.9	393.4
67.5°	238.7	262.5	311.0	351.7	364.5
70°	203.1	231.9	281.2	322.0	336.4
72.5°	172.5	201.4	253.2	293.1	307.6
75°	140.2	171.6	223.4	263.4	276.1
77.5°	107.9	142.7	194.6	225.1	229.4
80°	77.3	113.8	161.4	179.3	185.2
82.5°	54.4	87.5	118.9	130.8	134.2
85°	29.7	57.8	74.8	79.9	79.9
87.5°	12.7	24.6	29.7	30.6	31.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)