

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: P388469

Luminaire Tested: **24CZ2-30-SQR-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: P388469
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2002-678-2)
Test Lab: INNOVATION CENTER (G2)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-30-SQR-UNV-L935-CD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

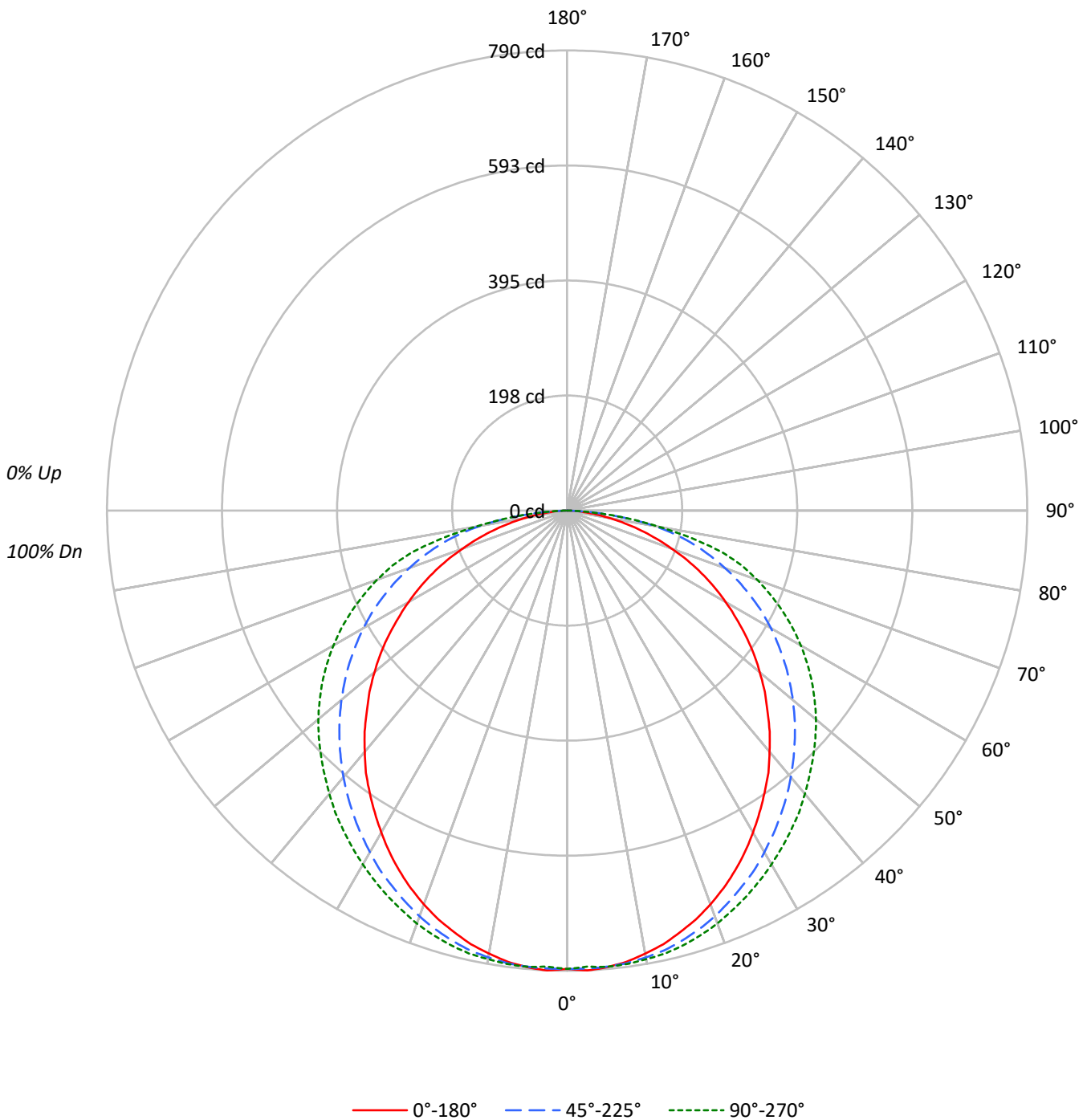
Lumens per Lamp: N/A
Luminaire Lumens: 2461.9 lumens
Efficiency: N/A
Efficacy: 101.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.33 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 24.2
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	81	75	95	87	80	74	83	78	73	80	75	71	77	73	69	67
3	89	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	52	64	57	51	62	55	50	60	54	49	47
5	74	61	51	44	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	30	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	52	38	30	25	50	37	30	24	36	29	24	36	29	24	35	29	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1059	1059	1059
5°	1063	1062	1062
10°	1055	1064	1069
15°	1044	1064	1076
20°	1030	1062	1080
25°	1013	1056	1084
30°	992	1052	1090
35°	971	1050	1100
40°	950	1049	1115
45°	925	1052	1137
50°	904	1059	1167
55°	877	1070	1203
60°	847	1087	1247
65°	810	1108	1299
70°	751	1135	1365
75°	680	1175	1429
80°	573	1178	1228
85°	440	891	891



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.7	3.0
10°-20°	214.9	8.7
20°-30°	326.4	13.3
30°-40°	397.1	16.1
40°-50°	422.8	17.2
50°-60°	402.7	16.4
60°-70°	336.7	13.7
70°-80°	224.5	9.1
80°-90°	62.1	2.5
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°	616.1	25.0
0°-40°	1013.1	41.2
0°-60°	1838.5	74.7
0°-90°	2461.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2461.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	787	787	787	787	787	
5°	787	782	786	786	786	75
15°	750	751	764	770	772	211
25°	682	691	711	724	730	314
35°	591	608	639	660	670	370
45°	486	512	553	584	598	376
55°	374	406	456	496	513	334
65°	254	292	348	391	408	251
75°	131	172	226	264	275	139
85°	28	53	58	57	58	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	786.9	786.9	786.9	786.9	786.9
2.5°	790.2	784.5	786.9	786.9	783.7
5°	786.9	782.1	786.1	786.1	786.1
7.5°	781.3	777.2	783.7	785.3	785.3
10°	772.3	770.7	778.8	781.3	782.1
12.5°	762.6	761.7	773.1	776.4	778.8
15°	749.5	751.2	764.2	769.9	772.3
17.5°	735.7	739.0	753.6	761.7	764.2
20°	719.5	724.3	741.4	749.5	754.4
22.5°	701.6	708.9	726.8	736.5	742.2
25°	682.1	691.0	711.3	723.5	730.0
27.5°	660.9	672.3	695.9	709.7	716.2
30°	638.2	651.2	677.2	693.5	701.6
32.5°	614.6	630.0	658.5	676.4	686.1
35°	591.0	608.1	639.0	660.1	669.9
37.5°	567.4	584.5	618.7	641.4	653.6
40°	540.6	560.9	597.5	622.7	634.9
42.5°	514.6	536.6	575.6	603.2	616.2
45°	486.1	512.2	552.8	583.7	597.5
47.5°	460.1	486.1	530.0	562.6	578.0
50°	431.7	459.3	505.7	541.4	557.7
52.5°	404.0	432.5	481.3	519.5	535.7
55°	374.0	406.5	456.1	495.9	513.0
57.5°	343.9	378.8	430.1	471.5	488.6
60°	314.6	350.4	404.0	445.5	463.4
62.5°	285.3	321.1	377.2	419.5	436.6
65°	254.5	291.9	347.9	391.0	408.1
67.5°	223.6	262.6	318.7	361.8	378.0
70°	191.0	232.5	288.6	330.9	347.1
72.5°	161.0	202.4	257.7	299.2	314.6
75°	130.9	172.3	226.0	264.2	274.8
77.5°	101.6	143.1	191.0	216.2	218.7
80°	74.0	113.0	152.0	159.3	158.5
82.5°	49.6	84.5	104.9	105.7	108.1
85°	28.5	52.8	57.7	56.9	57.7
87.5°	11.4	18.7	16.3	12.2	12.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)