

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: P230029

Luminaire Tested: **24CZ-LD5-30-S-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230029
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-30-S-UNV-L935-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2643.0 lumens
Efficiency: N/A
Efficacy: 122.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

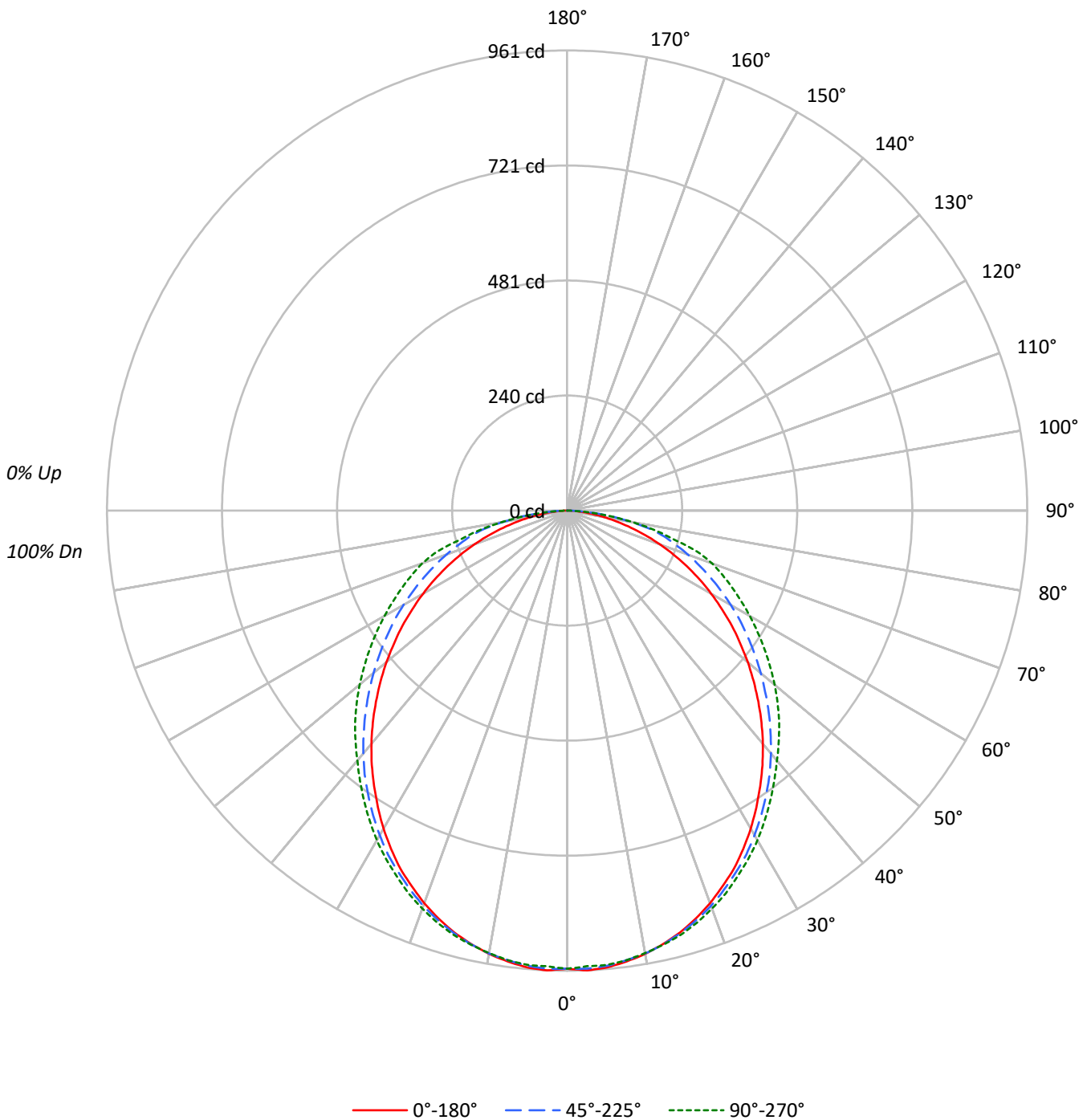
Input Watts (W): 21.62
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1287	1287	1287
5°	1293	1289	1286
10°	1284	1283	1282
15°	1270	1273	1278
20°	1249	1258	1267
25°	1225	1238	1251
30°	1191	1216	1235
35°	1154	1190	1215
40°	1117	1163	1197
45°	1074	1133	1192
50°	1031	1105	1184
55°	986	1081	1180
60°	935	1063	1186
65°	879	1050	1209
70°	810	1055	1266
75°	718	1093	1180
80°	600	1036	1063
85°	448	827	760



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.5	3.4
10°-20°	257.3	9.7
20°-30°	383.4	14.5
30°-40°	451.3	17.1
40°-50°	458.7	17.4
50°-60°	412.4	15.6
60°-70°	325.8	12.3
70°-80°	206.7	7.8
80°-90°	57.0	2.2
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°	731.2	27.7
0°-40°	1182.5	44.7
0°-60°	2053.5	77.7
0°-90°	2643.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2643.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	957	957	957	957	957	
5°	958	950	954	952	952	91
15°	912	908	914	916	917	257
25°	825	824	834	839	842	379
35°	703	707	725	733	740	440
45°	565	572	595	613	626	436
55°	420	431	461	491	503	375
65°	276	290	330	366	380	274
75°	138	162	210	229	227	147
85°	29	50	54	49	49	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	956.8	956.8	956.8	956.8	956.8
2.5°	961.2	954.2	957.7	955.9	952.4
5°	957.7	949.8	954.2	952.4	952.4
7.5°	949.8	943.6	947.1	946.3	947.1
10°	940.1	933.9	939.2	939.2	938.3
12.5°	926.9	921.6	927.8	927.8	928.7
15°	912.0	907.6	913.7	916.4	917.2
17.5°	893.5	889.1	897.0	899.7	902.3
20°	872.4	870.6	878.5	881.2	884.7
22.5°	848.6	848.6	856.6	860.1	865.4
25°	824.9	824.0	833.7	839.0	842.5
27.5°	796.8	797.6	810.0	815.2	819.6
30°	766.9	768.6	782.7	788.8	795.0
32.5°	735.2	738.7	754.5	761.6	767.7
35°	702.7	707.1	724.6	732.6	739.6
37.5°	670.1	676.3	694.7	702.7	710.6
40°	635.8	641.1	662.2	671.9	681.6
42.5°	600.6	607.7	628.8	642.9	654.3
45°	564.6	572.5	595.4	613.0	626.2
47.5°	528.5	539.1	561.1	584.8	596.3
50°	492.5	503.0	527.7	554.0	565.5
52.5°	455.5	466.1	494.2	521.5	533.8
55°	420.4	430.9	460.8	490.7	503.0
57.5°	383.4	394.9	428.3	459.1	471.4
60°	347.4	358.8	394.9	427.4	440.6
62.5°	312.2	324.5	362.3	396.6	409.8
65°	276.1	290.2	329.8	365.8	379.9
67.5°	241.0	256.8	298.1	335.9	350.9
70°	205.8	224.3	268.2	306.9	321.9
72.5°	171.5	191.7	238.3	277.0	284.9
75°	138.1	161.8	210.2	228.7	226.9
77.5°	106.4	132.8	178.5	182.0	187.3
80°	77.4	106.4	133.7	140.7	137.2
82.5°	51.0	80.0	95.9	92.3	91.5
85°	29.0	50.1	53.6	49.2	49.2
87.5°	12.3	20.2	17.6	13.2	12.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)