

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: P261048

Luminaire Tested: **24CZ-LD5-30-S-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261048
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-L93050-W2A1-U-3500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 90 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2661.7 lumens
Efficiency: N/A
Efficacy: 133.1 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

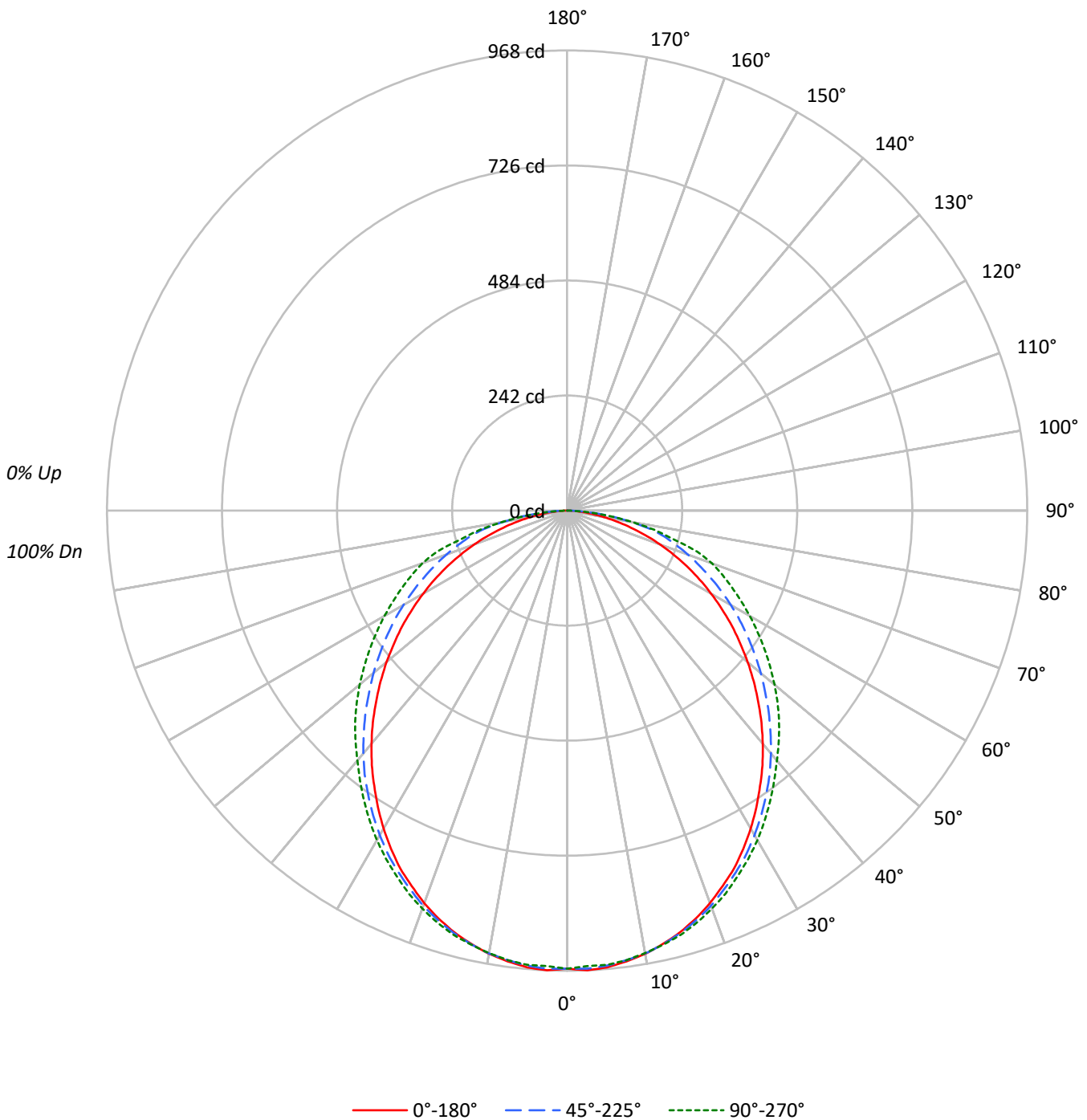
Input Watts (W): 19.995837
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1297	1297	1297
5°	1303	1298	1296
10°	1294	1292	1291
15°	1279	1282	1287
20°	1258	1267	1276
25°	1233	1246	1260
30°	1200	1225	1244
35°	1162	1199	1223
40°	1125	1171	1206
45°	1082	1141	1200
50°	1038	1112	1192
55°	993	1089	1188
60°	941	1070	1194
65°	885	1057	1218
70°	815	1063	1275
75°	723	1101	1188
80°	604	1043	1071
85°	451	834	766



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.1	3.4
10°-20°	259.1	9.7
20°-30°	386.1	14.5
30°-40°	454.5	17.1
40°-50°	461.9	17.4
50°-60°	415.3	15.6
60°-70°	328.1	12.3
70°-80°	208.1	7.8
80°-90°	57.4	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°	736.3	27.7
0°-40°	1190.9	44.7
0°-60°	2068.1	77.7
0°-90°	2661.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2661.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	964	964	964	964	964	
5°	964	956	961	959	959	91
15°	918	914	920	923	924	259
25°	831	830	840	845	848	382
35°	708	712	730	738	745	443
45°	569	577	600	617	631	439
55°	423	434	464	494	507	378
65°	278	292	332	368	383	275
75°	139	163	212	230	228	148
85°	29	50	54	50	50	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	963.6	963.6	963.6	963.6	963.6
2.5°	968.0	960.9	964.5	962.7	959.2
5°	964.5	956.5	960.9	959.2	959.2
7.5°	956.5	950.3	953.8	953.0	953.8
10°	946.8	940.6	945.9	945.9	945.0
12.5°	933.5	928.2	934.4	934.4	935.2
15°	918.4	914.0	920.2	922.8	923.7
17.5°	899.8	895.4	903.4	906.0	908.7
20°	878.6	876.8	884.8	887.4	891.0
22.5°	854.6	854.6	862.6	866.2	871.5
25°	830.7	829.8	839.6	844.9	848.4
27.5°	802.4	803.3	815.7	821.0	825.4
30°	772.3	774.1	788.2	794.4	800.6
32.5°	740.4	743.9	759.9	767.0	773.2
35°	707.6	712.1	729.8	737.7	744.8
37.5°	674.9	681.1	699.7	707.6	715.6
40°	640.3	645.6	666.9	676.6	686.4
42.5°	604.9	612.0	633.2	647.4	658.9
45°	568.6	576.6	599.6	617.3	630.6
47.5°	532.3	542.9	565.0	589.0	600.5
50°	496.0	506.6	531.4	558.0	569.5
52.5°	458.8	469.4	497.7	525.2	537.6
55°	423.3	434.0	464.1	494.2	506.6
57.5°	386.1	397.7	431.3	462.3	474.7
60°	349.8	361.3	397.7	430.4	443.7
62.5°	314.4	326.8	364.9	399.4	412.7
65°	278.1	292.3	332.1	368.4	382.6
67.5°	242.7	258.6	300.2	338.3	353.4
70°	207.2	225.8	270.1	309.1	324.1
72.5°	172.7	193.1	240.0	279.0	286.9
75°	139.0	163.0	211.7	230.3	228.5
77.5°	107.2	133.7	179.8	183.3	188.6
80°	77.9	107.2	134.6	141.7	138.2
82.5°	51.4	80.6	96.5	93.0	92.1
85°	29.2	50.5	54.0	49.6	49.6
87.5°	12.4	20.4	17.7	13.3	12.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)