

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: P261099

Luminaire Tested: **24CZ-LD5-30SE-S-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261099
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-LD5-30SE-S-UNV-L93050-W2A1-U-4000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2840.0 lumens
Efficiency: N/A
Efficacy: 127.2 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

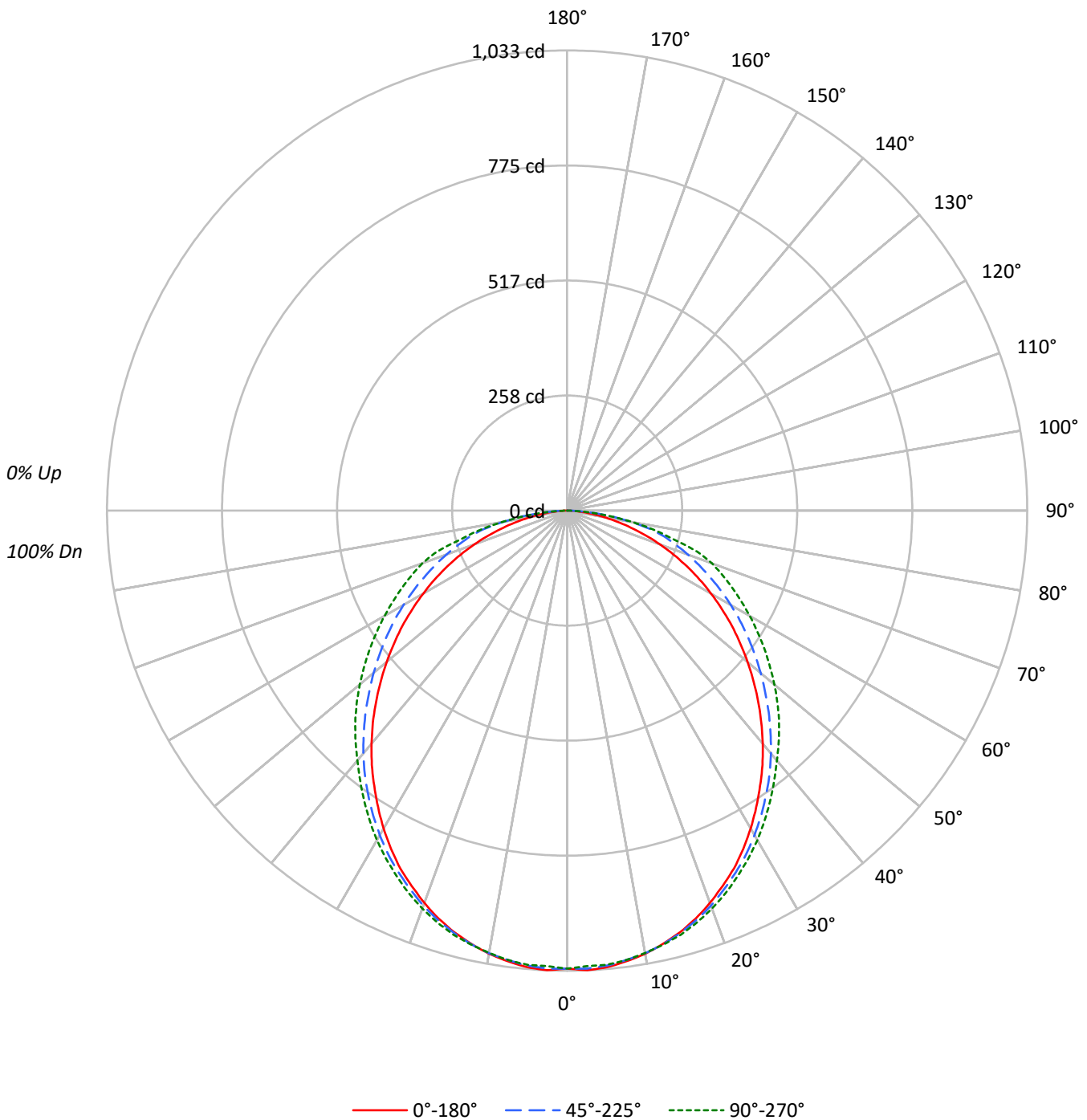
Input Watts (W): 22.327812
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1383	1383	1383
5°	1390	1385	1382
10°	1380	1379	1378
15°	1365	1368	1373
20°	1342	1352	1361
25°	1316	1330	1344
30°	1280	1307	1327
35°	1240	1279	1305
40°	1200	1250	1286
45°	1154	1217	1280
50°	1108	1187	1272
55°	1060	1162	1268
60°	1005	1142	1274
65°	945	1128	1300
70°	870	1134	1361
75°	771	1174	1267
80°	645	1113	1142
85°	482	889	817



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.2	3.4
10°-20°	276.5	9.7
20°-30°	412.0	14.5
30°-40°	485.0	17.1
40°-50°	492.8	17.4
50°-60°	443.1	15.6
60°-70°	350.1	12.3
70°-80°	222.1	7.8
80°-90°	61.3	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°	785.6	27.7
0°-40°	1270.6	44.7
0°-60°	2206.6	77.7
0°-90°	2840.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2840.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1028	1028	1028	1028	1028	
5°	1029	1021	1025	1023	1023	98
15°	980	975	982	985	986	276
25°	886	885	896	902	905	408
35°	755	760	779	787	795	472
45°	607	615	640	659	673	468
55°	452	463	495	527	540	403
65°	297	312	354	393	408	294
75°	148	174	226	246	244	158
85°	31	54	58	53	53	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1028.1	1028.1	1028.1	1028.1	1028.1
2.5°	1032.8	1025.3	1029.1	1027.2	1023.4
5°	1029.1	1020.6	1025.3	1023.4	1023.4
7.5°	1020.6	1014.0	1017.7	1016.8	1017.7
10°	1010.2	1003.6	1009.2	1009.2	1008.3
12.5°	996.0	990.3	996.9	996.9	997.9
15°	979.9	975.2	981.8	984.7	985.6
17.5°	960.1	955.4	963.9	966.7	969.5
20°	937.4	935.5	944.0	946.9	950.6
22.5°	911.9	911.9	920.4	924.2	929.8
25°	886.4	885.4	895.8	901.5	905.3
27.5°	856.1	857.1	870.3	876.0	880.7
30°	824.0	825.9	841.0	847.6	854.3
32.5°	790.0	793.8	810.8	818.3	825.0
35°	755.0	759.8	778.7	787.2	794.7
37.5°	720.1	726.7	746.5	755.0	763.5
40°	683.2	688.9	711.6	722.0	732.4
42.5°	645.4	653.0	675.7	690.8	703.1
45°	606.7	615.2	639.7	658.6	672.8
47.5°	567.9	579.3	602.9	628.4	640.7
50°	529.2	540.5	567.0	595.3	607.6
52.5°	489.5	500.8	531.1	560.4	573.6
55°	451.7	463.0	495.2	527.3	540.5
57.5°	412.0	424.3	460.2	493.3	506.5
60°	373.3	385.5	424.3	459.3	473.4
62.5°	335.5	348.7	389.3	426.2	440.4
65°	296.7	311.8	354.4	393.1	408.2
67.5°	258.9	275.9	320.3	361.0	377.0
70°	221.1	241.0	288.2	329.8	345.9
72.5°	184.3	206.0	256.1	297.7	306.2
75°	148.4	173.9	225.8	245.7	243.8
77.5°	114.3	142.7	191.8	195.6	201.3
80°	83.2	114.3	143.6	151.2	147.4
82.5°	54.8	86.0	103.0	99.2	98.3
85°	31.2	53.9	57.6	52.9	52.9
87.5°	13.2	21.7	18.9	14.2	13.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)