

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: P#

Luminaire Tested: **24CZ-LD5-30SE-S-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
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-L840-CD1-U
Description: CRUZE 2x4 LED TROFFER

Light Source: -
Ballast/Driver: -

Summary

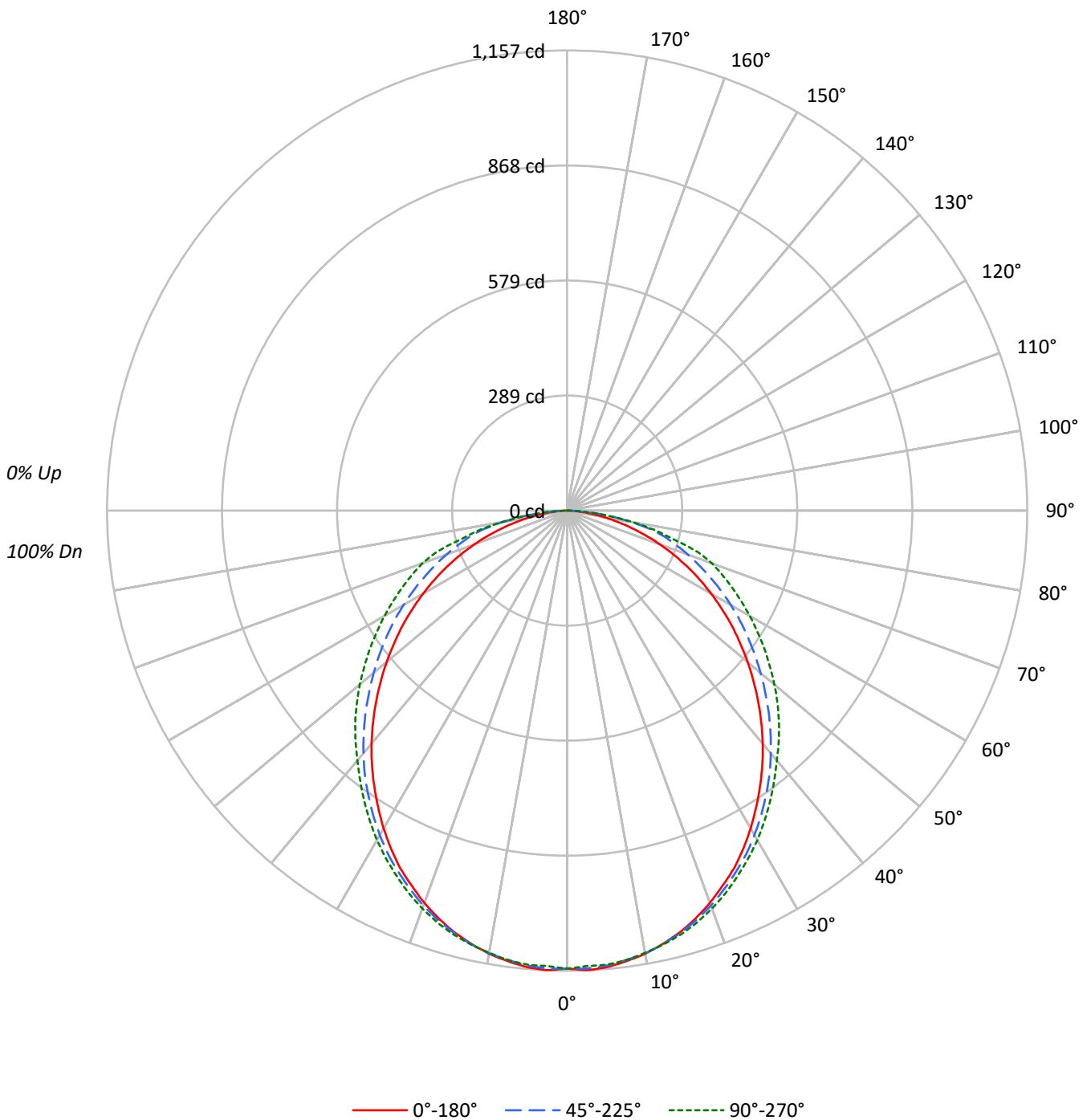
Lumens per Lamp: N/A
Luminaire Lumens: 3180.5 lumens
Efficiency: N/A
Efficacy: 135.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.1')
CIE Type: Direct

Input Watts (W): 23.5
Input Voltage (V): NR
Input Current (A_{in}): 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°	1549	1549	1549
5°	1553	1544	1541
10°	1539	1530	1529
15°	1518	1510	1517
20°	1490	1485	1497
25°	1457	1453	1471
30°	1413	1420	1445
35°	1365	1381	1412
40°	1316	1340	1383
45°	1261	1295	1365
50°	1205	1250	1344
55°	1146	1209	1325
60°	1078	1171	1313
65°	1004	1135	1315
70°	911	1108	1340
75°	790	1097	1196
80°	632	958	997
85°	419	621	583



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.9	3.4
10°-20°	309.6	9.7
20°-30°	461.4	14.5
30°-40°	543.1	17.1
40°-50°	551.9	17.4
50°-60°	496.2	15.6
60°-70°	392.0	12.3
70°-80°	248.7	7.8
80°-90°	68.7	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°	879.8	27.7
0°-40°	1423.0	44.7
0°-60°	2471.1	77.7
0°-90°	3180.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3180.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1151	1151	1151	1151	1151	
5°	1152	1143	1148	1146	1146	109
15°	1097	1092	1100	1103	1104	309
25°	993	992	1003	1010	1014	456
35°	846	851	872	882	890	529
45°	679	689	716	738	754	524
55°	506	519	554	590	605	452
65°	332	349	397	440	457	329
75°	166	195	253	275	273	177
85°	35	60	65	59	59	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1151.4	1151.4	1151.4	1151.4	1151.4
2.5°	1156.7	1148.2	1152.5	1150.3	1146.1
5°	1152.5	1142.9	1148.2	1146.1	1146.1
7.5°	1142.9	1135.5	1139.8	1138.7	1139.8
10°	1131.3	1123.9	1130.2	1130.2	1129.2
12.5°	1115.4	1109.1	1116.5	1116.5	1117.5
15°	1097.4	1092.1	1099.5	1102.7	1103.8
17.5°	1075.2	1069.9	1079.4	1082.6	1085.8
20°	1049.8	1047.7	1057.2	1060.4	1064.6
22.5°	1021.2	1021.2	1030.8	1035.0	1041.3
25°	992.7	991.6	1003.2	1009.6	1013.8
27.5°	958.8	959.9	974.7	981.0	986.3
30°	922.8	924.9	941.9	949.3	956.7
32.5°	884.7	888.9	908.0	916.5	923.9
35°	845.6	850.9	872.0	881.5	890.0
37.5°	806.4	813.8	836.0	845.6	855.1
40°	765.1	771.5	796.9	808.5	820.2
42.5°	722.8	731.3	756.7	773.6	787.4
45°	679.4	688.9	716.5	737.6	753.5
47.5°	636.0	648.7	675.2	703.8	717.5
50°	592.6	605.3	635.0	666.7	680.5
52.5°	548.2	560.9	594.7	627.6	642.4
55°	505.9	518.6	554.5	590.5	605.3
57.5°	461.4	475.2	515.4	552.4	567.2
60°	418.0	431.8	475.2	514.3	530.2
62.5°	375.7	390.5	436.0	477.3	493.2
65°	332.3	349.2	396.9	440.2	457.2
67.5°	290.0	309.0	358.8	404.3	422.3
70°	247.6	269.9	322.8	369.3	387.3
72.5°	206.4	230.7	286.8	333.4	342.9
75°	166.1	194.7	252.9	275.2	273.0
77.5°	128.1	159.8	214.8	219.1	225.4
80°	93.1	128.1	160.9	169.3	165.1
82.5°	61.4	96.3	115.4	111.1	110.1
85°	34.9	60.3	64.6	59.3	59.3
87.5°	14.8	24.3	21.2	15.9	14.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)