

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: P261215

Luminaire Tested: **24CZ-LD5-30SE-S-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261215  
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-L82765-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3089.0 lumens  
Efficiency: N/A  
Efficacy: 140.1 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

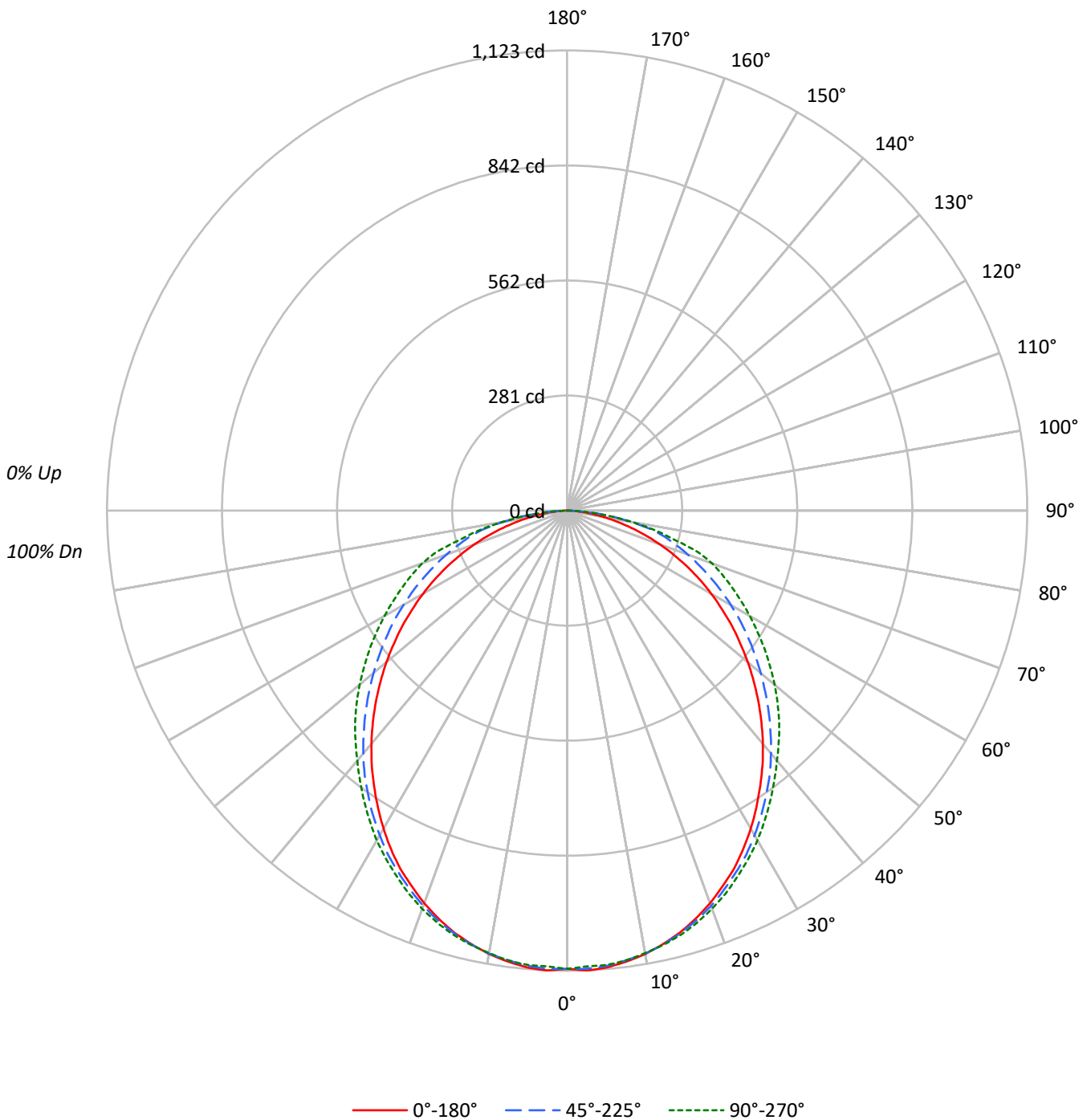
Input Watts (W): 22.041  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1505	1505	1505
5°	1512	1506	1503
10°	1501	1500	1498
15°	1485	1488	1493
20°	1460	1470	1481
25°	1431	1447	1462
30°	1393	1421	1444
35°	1349	1391	1420
40°	1305	1359	1399
45°	1256	1324	1392
50°	1205	1291	1383
55°	1152	1263	1379
60°	1093	1242	1386
65°	1027	1227	1414
70°	946	1233	1480
75°	839	1277	1379
80°	700	1210	1242
85°	523	968	889



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.7	3.4
10°-20°	300.7	9.7
20°-30°	448.1	14.5
30°-40°	527.5	17.1
40°-50°	536.1	17.4
50°-60°	481.9	15.6
60°-70°	380.7	12.3
70°-80°	241.6	7.8
80°-90°	66.7	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°	854.5	27.7
0°-40°	1382.0	44.7
0°-60°	2400.0	77.7
0°-90°	3089.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3089.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1118	1118	1118	1118	1118	
5°	1119	1110	1115	1113	1113	106
15°	1066	1061	1068	1071	1072	300
25°	964	963	974	980	985	443
35°	821	826	847	856	864	514
45°	660	669	696	716	732	509
55°	491	504	539	574	588	439
65°	323	339	385	428	444	320
75°	161	189	246	267	265	172
85°	34	59	63	58	58	42
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1118.3	1118.3	1118.3	1118.3	1118.3
2.5°	1123.4	1115.2	1119.3	1117.2	1113.1
5°	1119.3	1110.1	1115.2	1113.1	1113.1
7.5°	1110.1	1102.9	1107.0	1105.9	1107.0
10°	1098.7	1091.6	1097.7	1097.7	1096.7
12.5°	1083.3	1077.2	1084.4	1084.4	1085.4
15°	1065.9	1060.7	1067.9	1071.0	1072.0
17.5°	1044.3	1039.1	1048.4	1051.5	1054.5
20°	1019.6	1017.5	1026.8	1029.9	1034.0
22.5°	991.9	991.9	1001.1	1005.2	1011.4
25°	964.1	963.1	974.4	980.5	984.7
27.5°	931.2	932.2	946.6	952.8	957.9
30°	896.3	898.3	914.8	922.0	929.2
32.5°	859.3	863.4	881.9	890.1	897.3
35°	821.2	826.4	846.9	856.2	864.4
37.5°	783.2	790.4	812.0	821.2	830.5
40°	743.1	749.3	774.0	785.3	796.6
42.5°	702.0	710.2	734.9	751.3	764.7
45°	659.9	669.1	695.8	716.4	731.8
47.5°	617.7	630.1	655.8	683.5	696.9
50°	575.6	587.9	616.7	647.5	660.9
52.5°	532.4	544.7	577.6	609.5	623.9
55°	491.3	503.6	538.6	573.5	587.9
57.5°	448.1	461.5	500.6	536.5	550.9
60°	406.0	419.4	461.5	499.5	514.9
62.5°	364.9	379.3	423.5	463.5	479.0
65°	322.7	339.2	385.4	427.6	444.0
67.5°	281.6	300.1	348.4	392.6	410.1
70°	240.5	262.1	313.5	358.7	376.2
72.5°	200.4	224.1	278.5	323.8	333.0
75°	161.4	189.1	245.7	267.2	265.2
77.5°	124.4	155.2	208.6	212.8	218.9
80°	90.4	124.4	156.2	164.5	160.3
82.5°	59.6	93.5	112.0	107.9	106.9
85°	33.9	58.6	62.7	57.6	57.6
87.5°	14.4	23.6	20.6	15.4	14.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)