

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: P260604

Luminaire Tested: **24CZ-LD5-30SE-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260604  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-30SE-UNV-L83050-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3185.0 lumens  
Efficiency: N/A  
Efficacy: 143.1 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

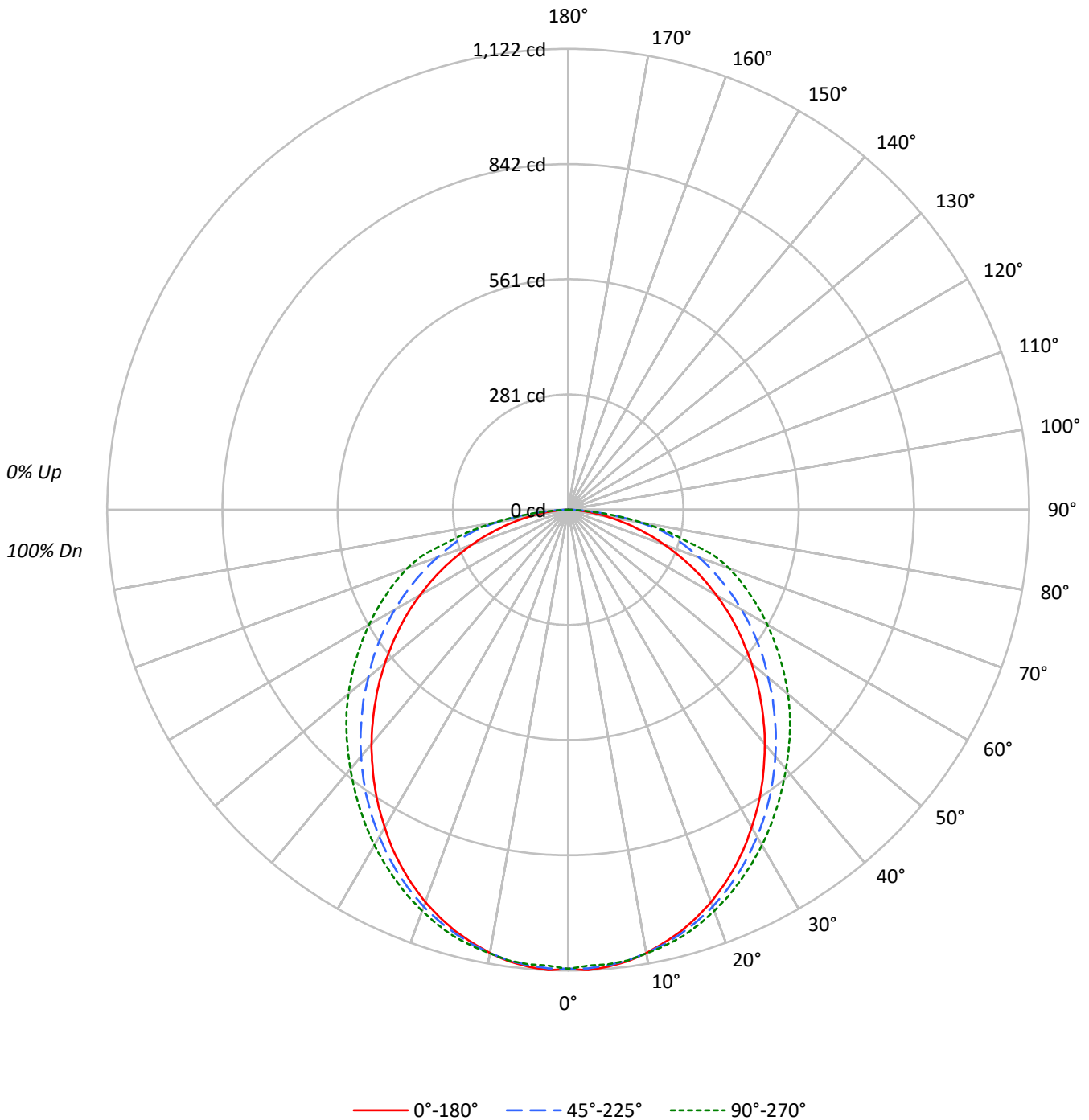
Input Watts (W): 22.262526  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	103	99	95	106	101	97	93	97	93	90		93	90	88		89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74		81	76	72		78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62		71	65	61		68	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52		63	57	52		61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		45	39	35	32
8	60	46	38	32	58	45	37	32	44	37	31		43	36	31		42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28		40	33	28		38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26		37	30	25		36	30	25	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1504	1504	1504
5°	1508	1504	1501
10°	1497	1497	1499
15°	1480	1487	1498
20°	1455	1472	1488
25°	1425	1452	1476
30°	1388	1428	1466
35°	1349	1404	1454
40°	1308	1377	1448
45°	1264	1351	1453
50°	1219	1329	1461
55°	1174	1320	1476
60°	1121	1312	1505
65°	1062	1312	1555
70°	982	1334	1639
75°	879	1395	1559
80°	735	1335	1428
85°	556	1027	976



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.6	3.3
10°-20°	300.6	9.4
20°-30°	449.4	14.1
30°-40°	533.2	16.7
40°-50°	548.7	17.2
50°-60°	503.4	15.8
60°-70°	407.0	12.8
70°-80°	264.2	8.3
80°-90°	72.8	2.3
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°	855.7	26.9
0°-40°	1388.8	43.6
0°-60°	2441.0	76.6
0°-90°	3185.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3185.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1118	1118	1118	1118	1118	
5°	1117	1109	1113	1112	1111	106
15°	1062	1058	1068	1072	1075	299
25°	960	961	978	987	994	442
35°	821	828	855	874	886	514
45°	664	675	710	744	763	513
55°	500	516	563	608	629	447
65°	334	353	412	467	488	330
75°	169	201	268	300	300	180
85°	36	61	66	64	63	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1117.8	1117.8	1117.8	1117.8	1117.8
2.5°	1122.1	1113.4	1117.8	1116.7	1111.2
5°	1116.7	1109.0	1113.4	1112.3	1111.2
7.5°	1109.0	1101.4	1106.9	1105.8	1106.9
10°	1096.0	1089.4	1096.0	1097.0	1097.0
12.5°	1079.6	1074.1	1082.9	1085.1	1087.2
15°	1062.2	1057.8	1067.6	1072.0	1075.2
17.5°	1040.3	1037.1	1049.1	1054.5	1058.9
20°	1016.4	1015.3	1028.3	1033.8	1039.3
22.5°	989.1	989.1	1004.4	1010.9	1018.5
25°	959.6	960.7	978.2	986.9	994.5
27.5°	928.0	929.1	949.8	960.7	969.5
30°	893.1	897.5	919.3	933.5	943.3
32.5°	858.2	863.7	887.7	904.0	914.9
35°	821.2	827.7	855.0	873.5	885.5
37.5°	783.0	790.6	820.1	840.8	855.0
40°	744.8	753.5	784.1	808.1	824.4
42.5°	704.5	714.3	748.1	776.4	793.9
45°	664.1	675.0	709.9	743.7	763.4
47.5°	623.8	636.9	673.9	711.0	731.7
50°	582.3	595.4	634.7	677.2	697.9
52.5°	540.9	556.2	599.8	643.4	664.1
55°	500.5	515.8	562.7	608.5	629.2
57.5°	459.1	474.4	525.6	573.6	594.3
60°	416.6	434.0	487.5	536.5	559.4
62.5°	375.1	393.7	450.4	502.7	524.5
65°	333.7	353.3	412.2	466.7	488.5
67.5°	291.2	314.1	375.1	430.8	453.7
70°	249.7	274.8	339.1	394.8	416.6
72.5°	209.4	236.6	303.2	359.9	373.0
75°	169.0	200.7	268.3	299.9	299.9
77.5°	130.9	165.8	229.0	241.0	247.5
80°	94.9	133.0	172.3	186.5	184.3
82.5°	63.2	101.4	123.2	123.2	120.0
85°	36.0	61.1	66.5	64.3	63.2
87.5°	15.3	22.9	20.7	16.4	14.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)