

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: P260606

Luminaire Tested: **24CZ-LD5-30SE-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260606  
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-5000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3215.0 lumens  
Efficiency: N/A  
Efficacy: 140.8 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

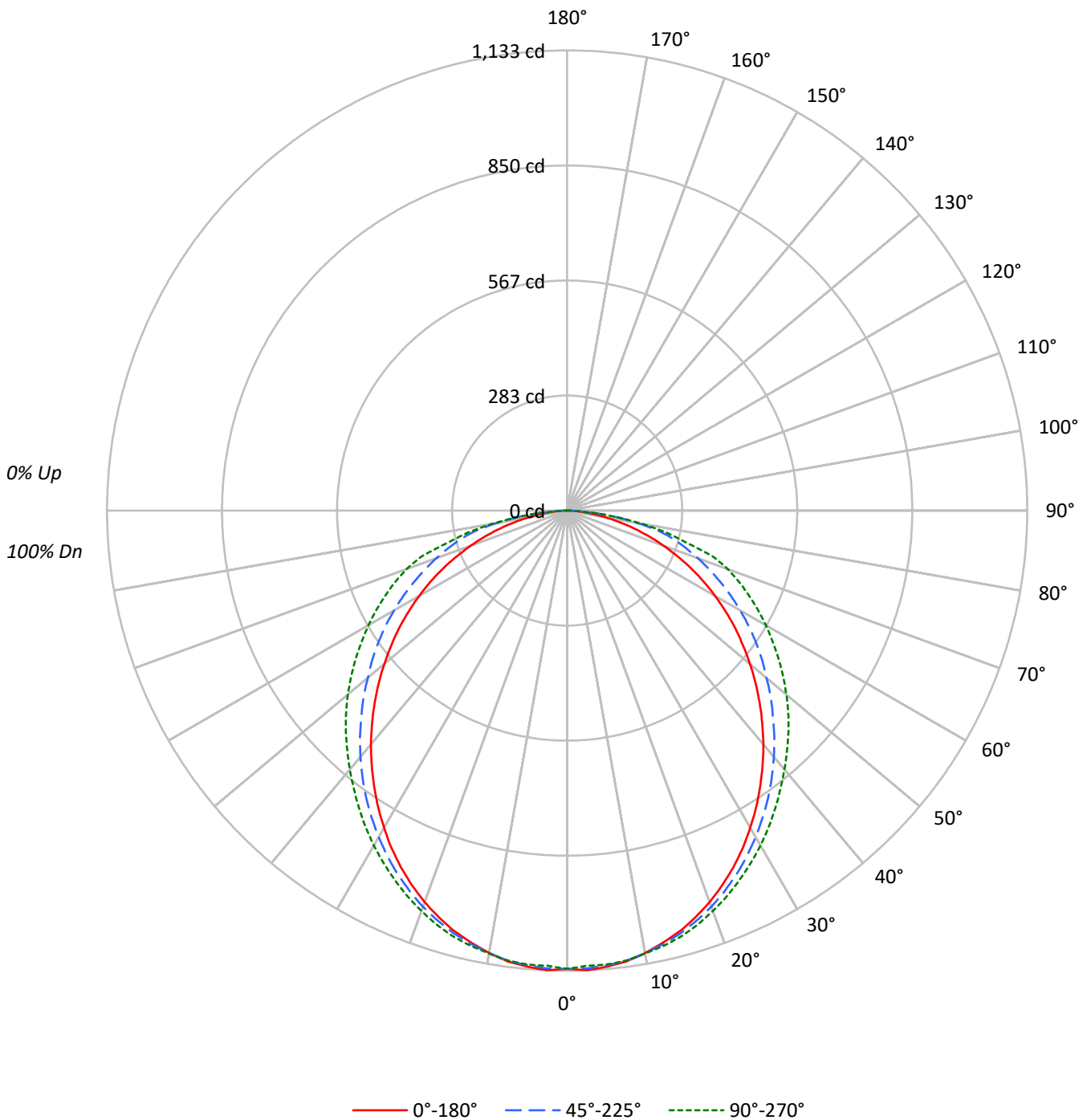
Input Watts (W): 22.828338  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1518	1518	1518
5°	1522	1518	1515
10°	1511	1511	1513
15°	1494	1501	1512
20°	1469	1486	1502
25°	1438	1466	1490
30°	1401	1442	1479
35°	1362	1418	1468
40°	1320	1390	1462
45°	1276	1364	1466
50°	1230	1341	1475
55°	1185	1332	1490
60°	1132	1324	1520
65°	1072	1325	1570
70°	992	1347	1654
75°	887	1408	1574
80°	742	1347	1441
85°	560	1036	985



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.6	3.3
10°-20°	303.5	9.4
20°-30°	453.6	14.1
30°-40°	538.2	16.7
40°-50°	553.9	17.2
50°-60°	508.1	15.8
60°-70°	410.9	12.8
70°-80°	266.7	8.3
80°-90°	73.5	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°	863.7	26.9
0°-40°	1401.9	43.6
0°-60°	2464.0	76.6
0°-90°	3215.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3215.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1128	1128	1128	1128	1128	
5°	1127	1120	1124	1123	1122	107
15°	1072	1068	1078	1082	1085	302
25°	969	970	987	996	1004	446
35°	829	836	863	882	894	518
45°	670	681	717	751	770	517
55°	505	521	568	614	635	451
65°	337	357	416	471	493	333
75°	171	202	271	303	303	181
85°	36	62	67	65	64	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1128.3	1128.3	1128.3	1128.3	1128.3
2.5°	1132.7	1123.9	1128.3	1127.2	1121.7
5°	1127.2	1119.5	1123.9	1122.8	1121.7
7.5°	1119.5	1111.8	1117.3	1116.2	1117.3
10°	1106.3	1099.7	1106.3	1107.4	1107.4
12.5°	1089.8	1084.3	1093.1	1095.3	1097.5
15°	1072.2	1067.8	1077.7	1082.1	1085.4
17.5°	1050.1	1046.8	1058.9	1064.5	1068.9
20°	1025.9	1024.8	1038.0	1043.5	1049.0
22.5°	998.4	998.4	1013.8	1020.4	1028.1
25°	968.7	969.8	987.4	996.2	1003.9
27.5°	936.8	937.9	958.8	969.8	978.6
30°	901.5	905.9	928.0	942.3	952.2
32.5°	866.3	871.8	896.0	912.5	923.6
35°	828.9	835.5	863.0	881.7	893.8
37.5°	790.4	798.1	827.8	848.7	863.0
40°	751.8	760.6	791.5	815.7	832.2
42.5°	711.1	721.0	755.1	783.8	801.4
45°	670.4	681.4	716.6	750.7	770.5
47.5°	629.6	642.9	680.3	717.7	738.6
50°	587.8	601.0	640.7	683.6	704.5
52.5°	546.0	561.4	605.4	649.5	670.4
55°	505.3	520.7	568.0	614.2	635.1
57.5°	463.4	478.8	530.6	579.0	599.9
60°	420.5	438.1	492.0	541.6	564.7
62.5°	378.7	397.4	454.6	507.5	529.5
65°	336.8	356.7	416.1	471.1	493.1
67.5°	293.9	317.0	378.7	434.8	457.9
70°	252.1	277.4	342.3	398.5	420.5
72.5°	211.3	238.9	306.0	363.3	376.5
75°	170.6	202.5	270.8	302.7	302.7
77.5°	132.1	167.3	231.2	243.3	249.9
80°	95.8	134.3	173.9	188.2	186.0
82.5°	63.8	102.4	124.4	124.4	121.1
85°	36.3	61.6	67.1	64.9	63.8
87.5°	15.4	23.1	20.9	16.5	14.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)