

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: P263546

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263546  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25696)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-30SE-RDP-UNV-L83050-W2A1-U-5000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2234.0 lumens  
Efficiency: N/A  
Efficacy: 97.9 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

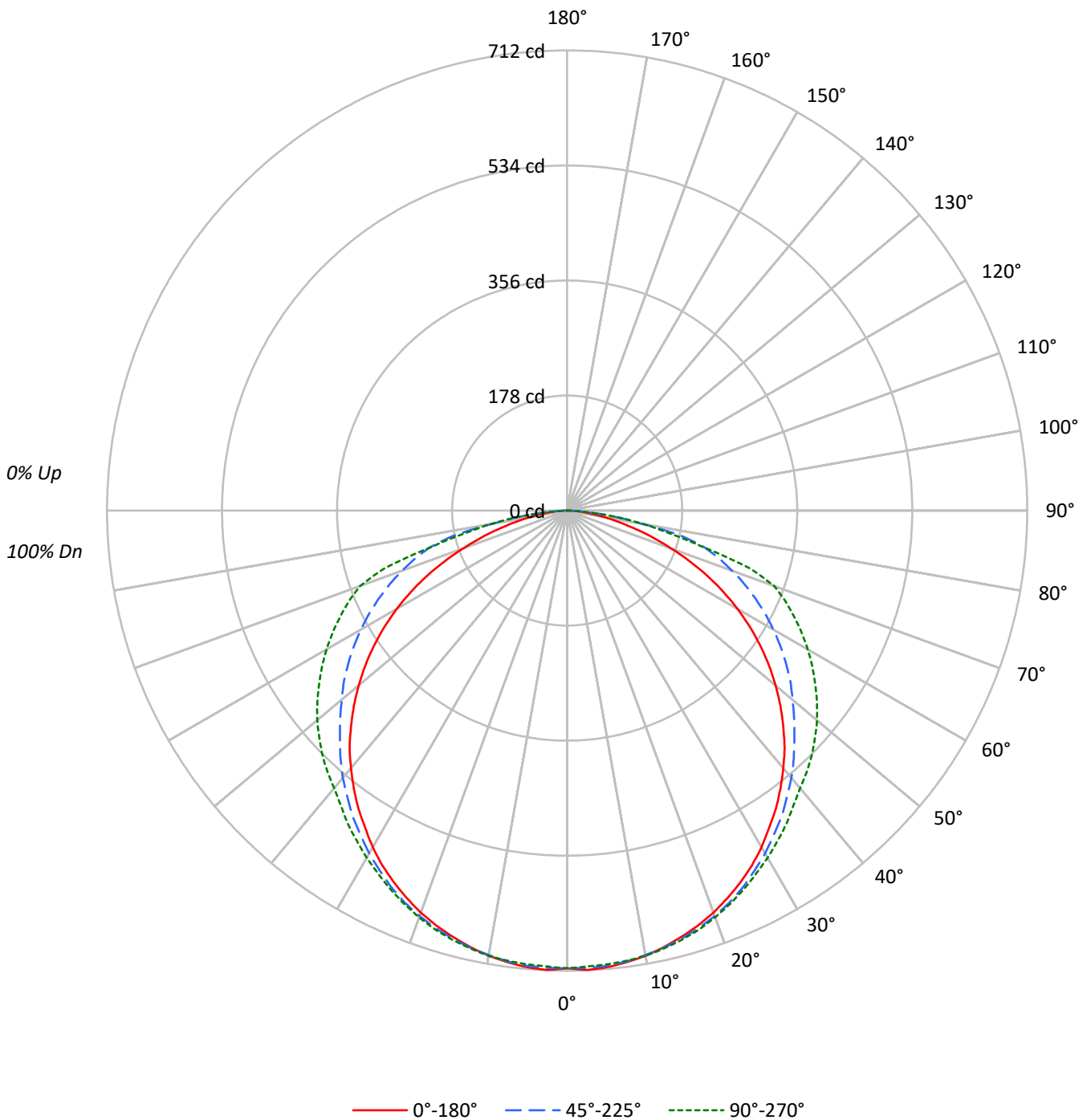
Input Watts (W): 22.828338  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20			20			20			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	98	94	105	101	97	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	52	64	57	51	62	55	50	60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	34	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	27
9	55	41	33	27	53	41	32	27	39	32	27	38	32	27	37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22

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

	0°	45°	90°
0°	953	953	953
5°	958	955	952
10°	956	954	956
15°	951	954	957
20°	948	956	959
25°	942	955	960
30°	935	952	964
35°	925	950	972
40°	914	948	985
45°	900	946	1019
50°	882	953	1057
55°	856	970	1099
60°	820	991	1157
65°	763	1022	1232
70°	675	1068	1341
75°	566	1143	1126
80°	452	903	938
85°	357	611	560



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.2	3.0
10°-20°	193.3	8.7
20°-30°	295.3	13.2
30°-40°	361.0	16.2
40°-50°	386.4	17.3
50°-60°	370.6	16.6
60°-70°	312.9	14.0
70°-80°	200.0	9.0
80°-90°	47.3	2.1
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°	555.7	24.9
0°-40°	916.7	41.0
0°-60°	1673.8	74.9
0°-90°	2234.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2234.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	708	708	708	708	708	
5°	709	705	707	706	705	67
15°	683	681	685	687	687	193
25°	634	633	643	646	647	292
35°	563	567	578	586	592	352
45°	473	481	497	520	536	365
55°	365	377	414	451	468	326
65°	240	263	321	366	387	236
75°	109	155	220	224	217	117
85°	23	38	40	38	36	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	708.2	708.2	708.2	708.2	708.2
2.5°	711.5	707.1	708.2	708.2	706.0
5°	709.3	704.9	707.1	706.0	704.9
7.5°	704.9	701.6	703.8	703.8	702.7
10°	699.4	696.1	698.3	699.4	699.4
12.5°	691.7	689.5	692.8	692.8	693.9
15°	682.9	680.7	685.1	687.3	687.3
17.5°	673.0	671.9	677.4	678.5	679.6
20°	662.0	660.9	667.5	667.5	669.7
22.5°	648.8	647.7	656.5	656.5	658.7
25°	634.5	633.4	643.3	645.5	646.6
27.5°	619.1	618.0	627.9	631.2	633.4
30°	601.5	601.5	612.5	616.9	620.2
32.5°	581.7	585.0	594.9	601.5	605.9
35°	563.0	567.4	578.4	586.1	591.6
37.5°	542.1	546.5	558.6	568.5	575.1
40°	520.2	525.6	539.9	550.9	560.8
42.5°	498.2	503.7	519.1	535.5	548.7
45°	472.9	480.6	497.1	520.2	535.5
47.5°	447.6	455.3	476.2	504.8	520.2
50°	421.2	430.0	455.3	488.3	504.8
52.5°	393.7	403.6	435.5	470.7	487.2
55°	365.1	377.2	413.5	450.9	468.5
57.5°	335.4	348.6	391.5	431.1	449.8
60°	304.6	321.1	368.4	410.2	430.0
62.5°	272.7	292.5	345.3	388.2	409.1
65°	239.7	262.8	321.1	366.2	387.1
67.5°	205.6	236.4	296.9	344.2	365.1
70°	171.6	207.8	271.6	320.0	340.9
72.5°	139.7	181.4	246.3	291.4	295.8
75°	108.9	155.1	219.9	224.3	216.6
77.5°	81.4	128.7	181.4	161.7	160.6
80°	58.3	103.4	116.6	119.9	121.0
82.5°	38.5	78.1	75.9	78.1	77.0
85°	23.1	38.5	39.6	38.5	36.3
87.5°	11.0	14.3	11.0	9.9	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)