

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: P230511

Luminaire Tested: **24CZ-LD5-40SE-RDP-UNV-L950-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230511  
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-LD5-40SE-RDP-UNV-L950-CD1-U  
Description: CRUZE 2x4 LED TROFFER  
WITH RDP LENS  
Light Source: (84) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2540.5 lumens  
Efficiency: N/A  
Efficacy: 78.0 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

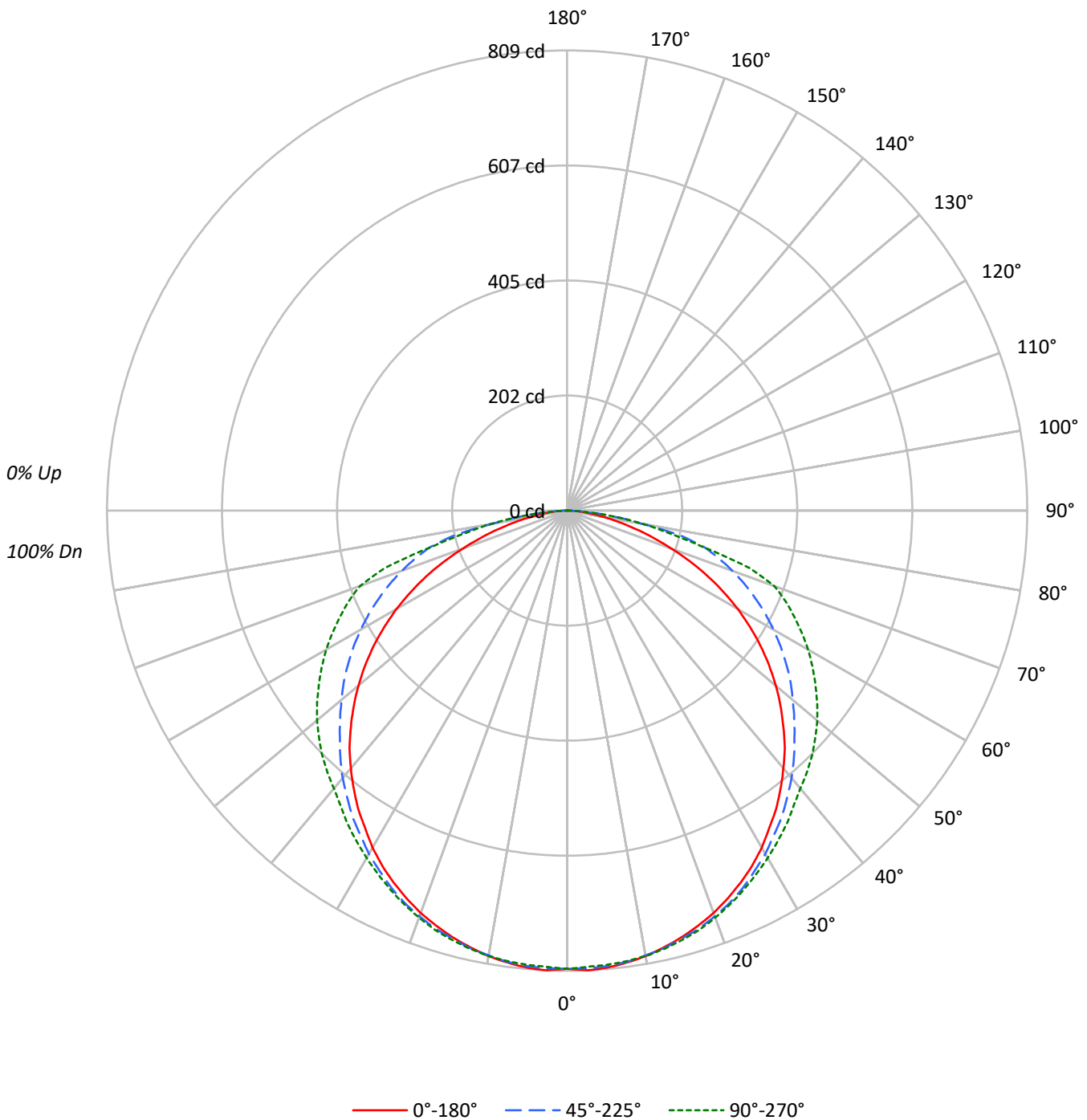
Input Watts (W): 32.55  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	62	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	52	64	57	51	62	56	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°	1084	1084	1084
5°	1089	1086	1083
10°	1087	1085	1087
15°	1082	1085	1089
20°	1078	1087	1090
25°	1071	1086	1092
30°	1063	1082	1096
35°	1052	1080	1105
40°	1039	1078	1120
45°	1023	1076	1159
50°	1003	1084	1202
55°	974	1103	1250
60°	932	1127	1316
65°	868	1163	1401
70°	768	1215	1525
75°	644	1300	1281
80°	514	1027	1066
85°	406	695	638



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.4	3.0
10°-20°	219.8	8.7
20°-30°	335.8	13.2
30°-40°	410.5	16.2
40°-50°	439.4	17.3
50°-60°	421.5	16.6
60°-70°	355.9	14.0
70°-80°	227.4	9.0
80°-90°	53.8	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°	632.0	24.9
0°-40°	1042.5	41.0
0°-60°	1903.4	74.9
0°-90°	2540.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2540.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	805	805	805	805	805	
5°	807	802	804	803	802	77
15°	777	774	779	782	782	219
25°	722	720	732	734	735	333
35°	640	645	658	666	673	400
45°	538	546	565	592	609	415
55°	415	429	470	513	533	371
65°	273	299	365	416	440	269
75°	124	176	250	255	246	133
85°	26	44	45	44	41	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	805.4	805.4	805.4	805.4	805.4
2.5°	809.1	804.1	805.4	805.4	802.9
5°	806.6	801.6	804.1	802.9	801.6
7.5°	801.6	797.9	800.4	800.4	799.1
10°	795.4	791.6	794.1	795.4	795.4
12.5°	786.6	784.1	787.8	787.8	789.1
15°	776.6	774.1	779.1	781.6	781.6
17.5°	765.3	764.1	770.3	771.6	772.8
20°	752.8	751.6	759.1	759.1	761.6
22.5°	737.8	736.6	746.6	746.6	749.1
25°	721.6	720.3	731.6	734.1	735.3
27.5°	704.1	702.8	714.1	717.8	720.3
30°	684.1	684.1	696.6	701.6	705.3
32.5°	661.5	665.3	676.6	684.1	689.1
35°	640.3	645.3	657.8	666.5	672.8
37.5°	616.5	621.5	635.3	646.5	654.0
40°	591.5	597.8	614.0	626.5	637.8
42.5°	566.5	572.8	590.3	609.0	624.0
45°	537.7	546.5	565.3	591.5	609.0
47.5°	509.0	517.7	541.5	574.0	591.5
50°	479.0	489.0	517.7	555.2	574.0
52.5°	447.7	459.0	495.2	535.2	554.0
55°	415.2	428.9	470.2	512.7	532.7
57.5°	381.4	396.4	445.2	490.2	511.5
60°	346.4	365.2	418.9	466.5	489.0
62.5°	310.1	332.6	392.7	441.4	465.2
65°	272.6	298.9	365.2	416.4	440.2
67.5°	233.9	268.9	337.6	391.4	415.2
70°	195.1	236.4	308.9	363.9	387.7
72.5°	158.8	206.3	280.1	331.4	336.4
75°	123.8	176.3	250.1	255.1	246.4
77.5°	92.5	146.3	206.3	183.8	182.6
80°	66.3	117.6	132.6	136.3	137.6
82.5°	43.8	88.8	86.3	88.8	87.5
85°	26.3	43.8	45.0	43.8	41.3
87.5°	12.5	16.3	12.5	11.3	10.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)