

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: P230405

Luminaire Tested: **24CZ-LD5-50-SQP-UNV-L935-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230405  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25695)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-50-SQP-UNV-L935-CD1-U  
Description: CRUZE 2x4 LED TROFFER  
WITH SQP LENS  
Light Source: (168) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2967.0 lumens  
Efficiency: N/A  
Efficacy: 72.9 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.42  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

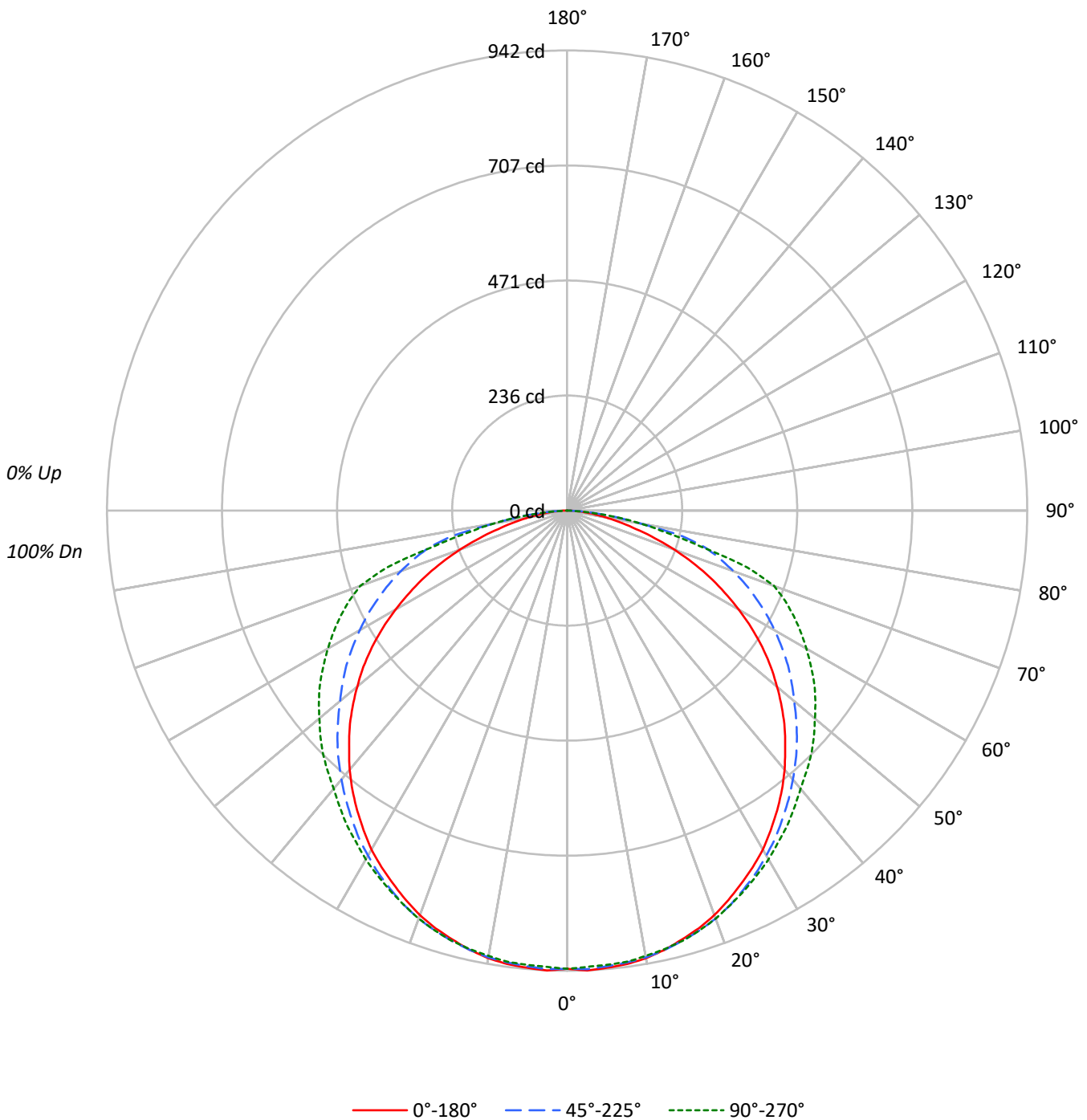
Input Watts (W): 40.68  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	63	58	56
4	81	68	59	52	79	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	62	49	40	34	47	39	34		45	39	33		44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30		42	35	30		40	34	29	28
9	55	41	33	27	54	41	33	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°	1262	1262	1262
5°	1269	1265	1261
10°	1271	1269	1265
15°	1266	1270	1270
20°	1262	1273	1273
25°	1251	1270	1274
30°	1245	1267	1281
35°	1231	1264	1291
40°	1217	1263	1306
45°	1199	1266	1344
50°	1174	1270	1386
55°	1143	1294	1449
60°	1093	1320	1522
65°	1025	1361	1630
70°	916	1423	1773
75°	757	1522	1466
80°	618	1175	1188
85°	497	781	733



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.1	3.0
10°-20°	257.0	8.7
20°-30°	392.9	13.2
30°-40°	480.5	16.2
40°-50°	514.1	17.3
50°-60°	492.3	16.6
60°-70°	416.4	14.0
70°-80°	264.0	8.9
80°-90°	60.7	2.0
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°	739.0	24.9
0°-40°	1219.4	41.1
0°-60°	2225.8	75.0
0°-90°	2967.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2967.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	938	938	938	938	938	
5°	940	935	936	935	933	89
15°	909	907	912	912	912	257
25°	843	843	855	858	858	389
35°	749	754	769	780	786	469
45°	630	641	665	693	706	485
55°	487	503	552	598	618	435
65°	322	352	428	486	512	317
75°	146	205	293	291	282	158
85°	32	49	51	46	48	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	937.9	937.9	937.9	937.9	937.9
2.5°	942.5	937.9	939.5	937.9	934.9
5°	939.5	934.9	936.4	934.9	933.3
7.5°	936.4	931.8	933.3	931.8	931.8
10°	930.3	925.7	928.7	927.2	925.7
12.5°	921.1	918.0	921.1	919.5	919.5
15°	908.8	907.3	911.9	911.9	911.9
17.5°	896.5	895.0	901.1	901.1	901.1
20°	881.2	879.7	888.9	888.9	888.9
22.5°	862.8	861.3	873.6	873.6	873.6
25°	842.9	842.9	855.2	858.2	858.2
27.5°	823.0	823.0	836.8	841.4	841.4
30°	801.5	801.5	815.3	821.4	824.5
32.5°	775.5	778.5	793.9	801.5	804.6
35°	749.4	754.0	769.3	780.1	786.2
37.5°	721.8	726.4	744.8	757.1	764.7
40°	692.7	698.8	718.8	734.1	743.3
42.5°	660.5	669.7	692.7	712.6	724.9
45°	629.9	640.6	665.1	692.7	706.5
47.5°	596.2	608.4	636.0	671.3	685.0
50°	560.9	573.2	606.9	646.7	662.1
52.5°	525.7	539.5	579.3	622.2	640.6
55°	487.4	502.7	551.7	597.7	617.6
57.5°	447.5	465.9	521.1	570.1	591.6
60°	406.1	429.1	490.4	542.5	565.5
62.5°	363.2	390.8	459.8	514.9	539.5
65°	321.8	352.5	427.6	485.8	511.9
67.5°	277.4	315.7	395.4	458.2	482.8
70°	232.9	277.4	361.7	426.0	450.6
72.5°	188.5	242.1	328.0	386.2	386.2
75°	145.6	205.4	292.7	291.2	282.0
77.5°	110.3	171.6	240.6	205.4	206.9
80°	79.7	137.9	151.7	151.7	153.3
82.5°	53.6	105.7	98.1	96.6	99.6
85°	32.2	49.0	50.6	46.0	47.5
87.5°	15.3	16.9	13.8	9.2	9.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)