

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: P230394

Luminaire Tested: **24CZ-LD5-35-SQP-UNV-L940-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230394  
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-LD5-35-SQP-UNV-L940-CD1-U  
Description: CRUZE 2x4 LED TROFFER  
WITH SQP LENS  
Light Source: (168) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2129.6 lumens  
Efficiency: N/A  
Efficacy: 84.1 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

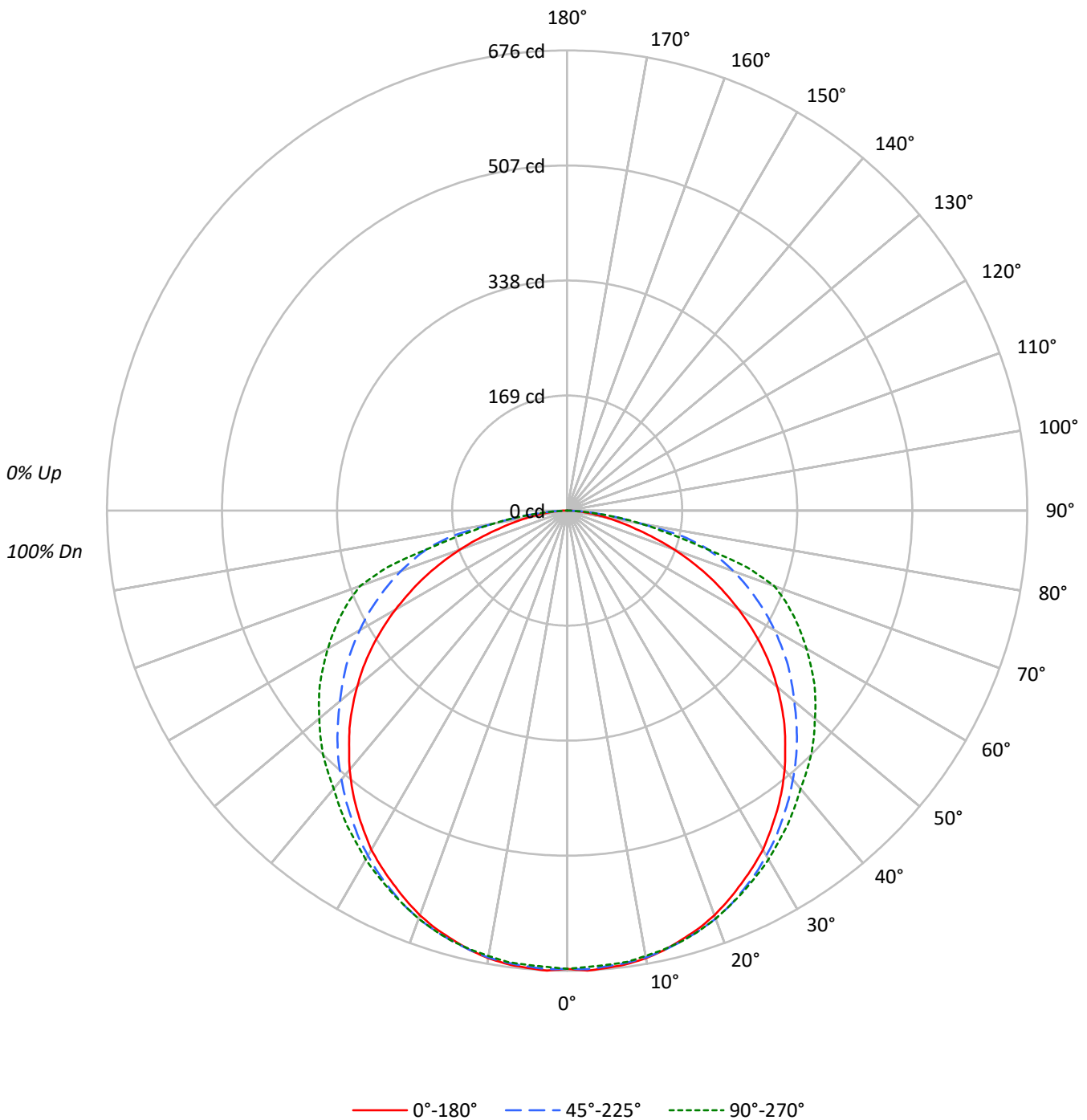
Input Watts (W): 25.32  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	906	906	906
5°	911	908	905
10°	912	911	908
15°	909	912	912
20°	906	914	914
25°	898	911	915
30°	894	909	919
35°	884	907	927
40°	873	906	937
45°	860	908	965
50°	843	912	995
55°	821	929	1040
60°	784	947	1092
65°	735	977	1170
70°	658	1021	1272
75°	543	1092	1052
80°	443	844	852
85°	357	560	526



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.9	3.0
10°-20°	184.5	8.7
20°-30°	282.0	13.2
30°-40°	344.9	16.2
40°-50°	369.0	17.3
50°-60°	353.3	16.6
60°-70°	298.9	14.0
70°-80°	189.5	8.9
80°-90°	43.6	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°	530.4	24.9
0°-40°	875.3	41.1
0°-60°	1597.6	75.0
0°-90°	2129.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2129.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	673	673	673	673	673	
5°	674	671	672	671	670	64
15°	652	651	654	654	654	184
25°	605	605	614	616	616	279
35°	538	541	552	560	564	337
45°	452	460	477	497	507	348
55°	350	361	396	429	443	312
65°	231	253	307	349	367	228
75°	104	147	210	209	202	114
85°	23	35	36	33	34	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	673.2	673.2	673.2	673.2	673.2
2.5°	676.5	673.2	674.3	673.2	671.0
5°	674.3	671.0	672.1	671.0	669.9
7.5°	672.1	668.8	669.9	668.8	668.8
10°	667.7	664.4	666.6	665.5	664.4
12.5°	661.1	658.9	661.1	660.0	660.0
15°	652.3	651.2	654.5	654.5	654.5
17.5°	643.5	642.4	646.8	646.8	646.8
20°	632.5	631.4	638.0	638.0	638.0
22.5°	619.3	618.2	627.0	627.0	627.0
25°	605.0	605.0	613.8	616.0	616.0
27.5°	590.7	590.7	600.6	603.9	603.9
30°	575.3	575.3	585.2	589.6	591.8
32.5°	556.6	558.8	569.8	575.3	577.5
35°	537.9	541.2	552.2	559.9	564.3
37.5°	518.1	521.4	534.6	543.4	548.9
40°	497.2	501.6	515.9	526.9	533.5
42.5°	474.1	480.7	497.2	511.5	520.3
45°	452.1	459.8	477.4	497.2	507.1
47.5°	427.9	436.7	456.5	481.8	491.7
50°	402.6	411.4	435.6	464.2	475.2
52.5°	377.3	387.2	415.8	446.6	459.8
55°	349.8	360.8	396.0	429.0	443.3
57.5°	321.2	334.4	374.0	409.2	424.6
60°	291.5	308.0	352.0	389.4	405.9
62.5°	260.7	280.5	330.0	369.6	387.2
65°	231.0	253.0	306.9	348.7	367.4
67.5°	199.1	226.6	283.8	328.9	346.5
70°	167.2	199.1	259.6	305.8	323.4
72.5°	135.3	173.8	235.4	277.2	277.2
75°	104.5	147.4	210.1	209.0	202.4
77.5°	79.2	123.2	172.7	147.4	148.5
80°	57.2	99.0	108.9	108.9	110.0
82.5°	38.5	75.9	70.4	69.3	71.5
85°	23.1	35.2	36.3	33.0	34.1
87.5°	11.0	12.1	9.9	6.6	6.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)