

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: P259180

Luminaire Tested: **14CZ-LD5-29-SQP-UNV-L92765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259180  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35908)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ-LD5-29-SQP-UNV-L92765-W2A1-U-6500K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1800.0 lumens  
Efficiency: N/A  
Efficacy: 77.7 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

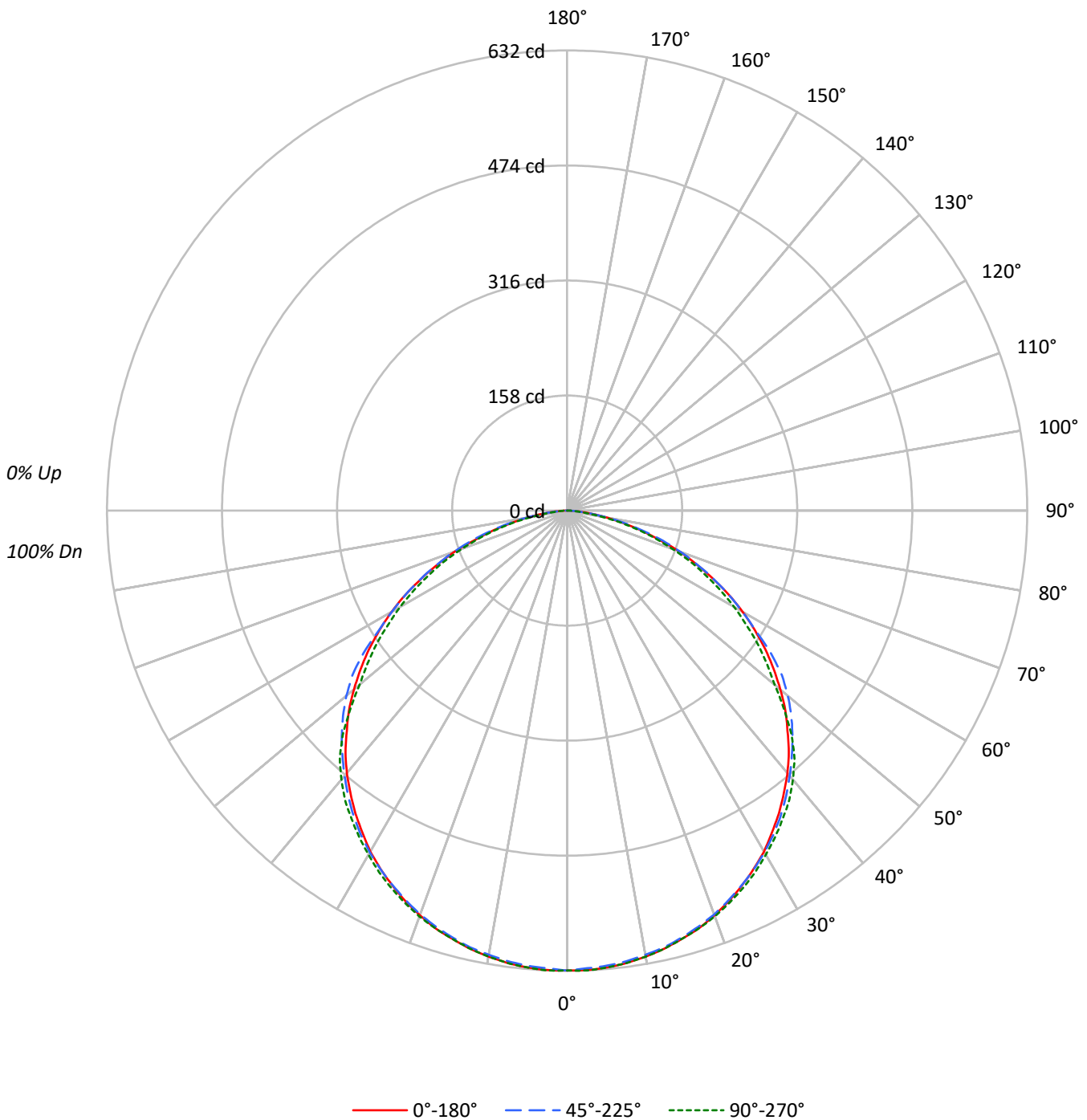
Input Watts (W): 23.157  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	65	62	59
4	83	71	62	55	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	50	46	44
6	70	57	48	42	68	56	48	41	54	47	41	52	46	41	51	45	40	38
7	65	52	43	37	63	51	42	37	49	42	36	48	41	36	46	40	36	34
8	61	47	39	33	59	46	38	33	45	38	32	44	37	32	43	37	32	30
9	57	43	35	29	55	43	35	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	1700	1700	1700
5°	1701	1695	1701
10°	1699	1693	1699
15°	1697	1692	1697
20°	1694	1690	1699
25°	1687	1685	1698
30°	1680	1684	1696
35°	1667	1680	1696
40°	1653	1671	1694
45°	1629	1666	1659
50°	1600	1657	1557
55°	1559	1605	1499
60°	1499	1496	1427
65°	1405	1413	1335
70°	1290	1304	1209
75°	1084	1134	1033
80°	860	879	727
85°	565	491	414



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.8	3.3
10°-20°	171.9	9.6
20°-30°	262.5	14.6
30°-40°	320.3	17.8
40°-50°	335.0	18.6
50°-60°	296.5	16.5
60°-70°	218.4	12.1
70°-80°	113.0	6.3
80°-90°	22.5	1.3
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°	494.3	27.5
0°-40°	814.6	45.3
0°-60°	1446.1	80.3
0°-90°	1800.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1800.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	632	632	632	632	632	
5°	630	630	627	630	630	60
15°	609	609	607	610	609	172
25°	568	568	568	571	572	262
35°	507	508	512	516	516	317
45°	428	432	438	441	436	330
55°	332	339	342	324	320	296
65°	221	234	222	213	210	219
75°	104	112	109	102	99	111
85°	18	20	16	14	13	24
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	631.7	631.7	631.7	631.7	631.7
2.5°	631.7	631.7	629.2	631.7	632.3
5°	629.8	629.8	627.4	629.8	629.8
7.5°	626.8	626.2	624.3	626.8	626.8
10°	621.9	621.9	619.5	622.5	621.9
12.5°	616.4	615.8	614.6	617.0	616.4
15°	609.1	609.1	607.3	609.7	609.1
17.5°	601.8	601.2	599.3	601.8	601.8
20°	591.4	590.8	590.2	592.6	593.2
22.5°	580.4	579.8	579.2	582.9	582.9
25°	568.2	568.2	567.6	571.3	571.9
27.5°	554.8	554.8	555.4	560.3	559.7
30°	540.8	540.8	542.0	545.7	545.7
32.5°	523.7	525.0	527.4	531.7	531.7
35°	507.3	508.5	511.5	516.4	516.4
37.5°	489.0	490.8	493.9	500.0	501.2
40°	470.7	471.9	475.6	482.3	482.3
42.5°	450.6	451.8	456.7	463.4	462.2
45°	428.0	431.7	437.8	441.4	435.9
47.5°	406.7	409.1	417.6	413.4	404.2
50°	382.3	387.2	395.7	380.5	371.9
52.5°	357.3	362.8	371.9	350.6	345.7
55°	332.3	339.0	342.0	324.4	319.5
57.5°	305.5	312.8	306.7	296.3	291.4
60°	278.6	287.2	278.0	268.3	265.2
62.5°	250.6	260.3	250.0	241.4	237.2
65°	220.7	234.1	221.9	213.4	209.7
67.5°	191.4	205.5	192.7	185.3	182.9
70°	164.0	171.9	165.8	158.5	153.6
72.5°	131.1	139.0	137.8	129.9	126.8
75°	104.3	111.6	109.1	102.4	99.4
77.5°	77.4	85.4	82.9	75.0	73.8
80°	55.5	61.0	56.7	49.4	46.9
82.5°	34.8	39.0	33.5	28.0	26.8
85°	18.3	19.5	15.9	14.0	13.4
87.5°	6.1	6.7	6.7	6.1	6.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)