

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: P259177

Luminaire Tested: **14CZ-LD5-29-SQP-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259177  
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-5000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1753.0 lumens  
Efficiency: N/A  
Efficacy: 77.3 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

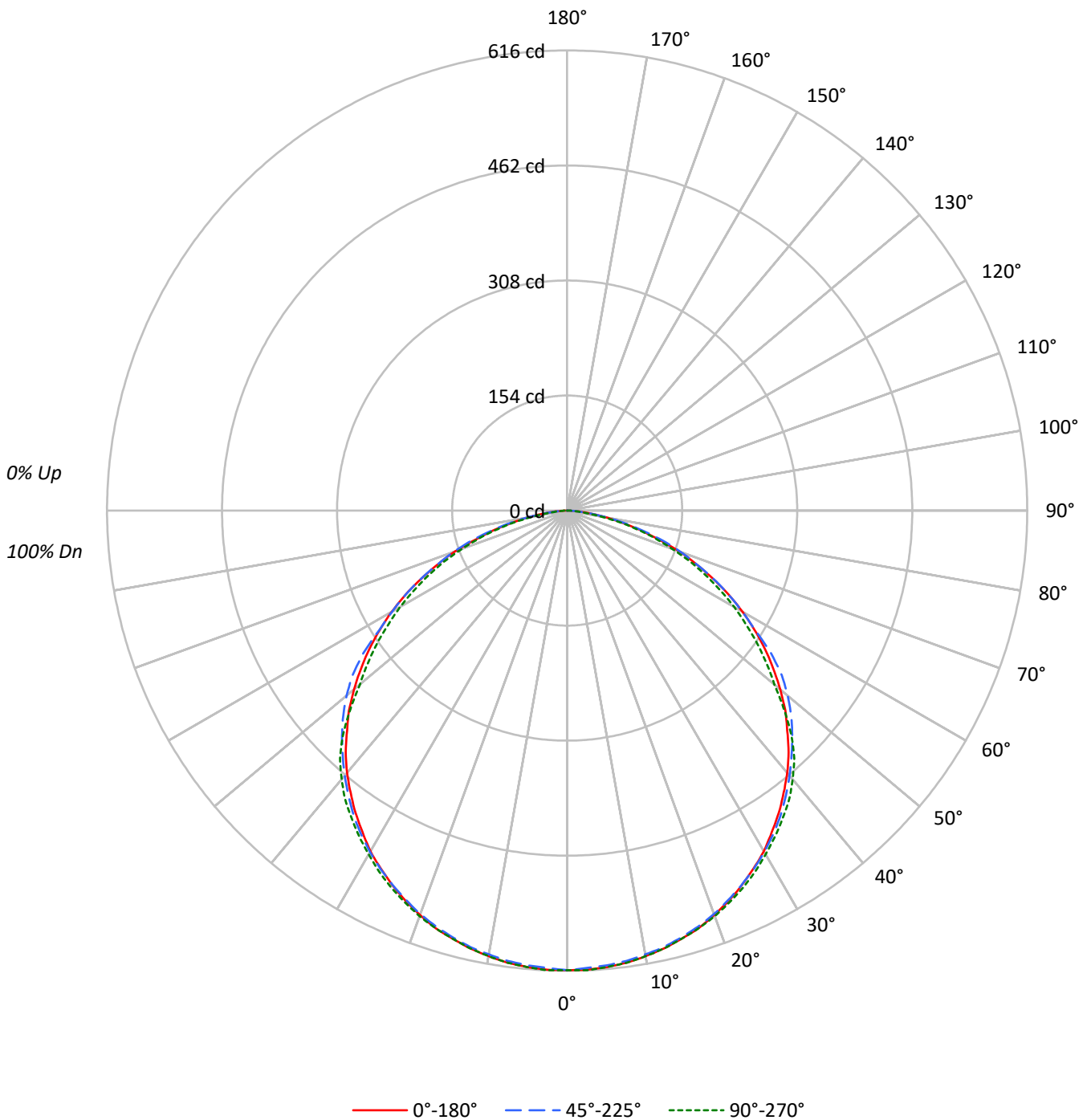
Input Watts (W): 22.692  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1655	1655	1655
5°	1657	1650	1657
10°	1655	1649	1655
15°	1653	1648	1653
20°	1649	1646	1655
25°	1643	1641	1654
30°	1637	1640	1651
35°	1623	1637	1652
40°	1610	1627	1650
45°	1586	1622	1616
50°	1559	1613	1516
55°	1518	1563	1460
60°	1461	1457	1390
65°	1368	1376	1301
70°	1257	1271	1177
75°	1055	1105	1006
80°	837	855	708
85°	550	475	404



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.3	3.3
10°-20°	167.4	9.6
20°-30°	255.7	14.6
30°-40°	311.9	17.8
40°-50°	326.2	18.6
50°-60°	288.8	16.5
60°-70°	212.6	12.1
70°-80°	110.1	6.3
80°-90°	21.9	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°	481.4	27.5
0°-40°	793.3	45.3
0°-60°	1408.3	80.3
0°-90°	1753.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1753.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	615	615	615	615	615	
5°	613	613	611	613	613	58
15°	593	593	591	594	593	168
25°	553	553	553	556	557	255
35°	494	495	498	503	503	309
45°	417	420	426	430	425	322
55°	324	330	333	316	311	289
65°	215	228	216	208	204	213
75°	102	109	106	100	97	108
85°	18	19	15	14	13	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	615.2	615.2	615.2	615.2	615.2
2.5°	615.2	615.2	612.8	615.2	615.8
5°	613.4	613.4	611.0	613.4	613.4
7.5°	610.4	609.8	608.0	610.4	610.4
10°	605.7	605.7	603.3	606.3	605.7
12.5°	600.3	599.7	598.5	600.9	600.3
15°	593.2	593.2	591.4	593.8	593.2
17.5°	586.1	585.5	583.7	586.1	586.1
20°	576.0	575.4	574.8	577.2	577.8
22.5°	565.3	564.7	564.1	567.7	567.7
25°	553.4	553.4	552.8	556.4	557.0
27.5°	540.3	540.3	540.9	545.7	545.1
30°	526.7	526.7	527.9	531.4	531.4
32.5°	510.1	511.2	513.6	517.8	517.8
35°	494.0	495.2	498.2	502.9	502.9
37.5°	476.2	478.0	481.0	486.9	488.1
40°	458.4	459.6	463.2	469.7	469.7
42.5°	438.8	440.0	444.7	451.3	450.1
45°	416.8	420.4	426.3	429.9	424.6
47.5°	396.1	398.4	406.7	402.6	393.7
50°	372.3	377.1	385.4	370.5	362.2
52.5°	348.0	353.3	362.2	341.4	336.7
55°	323.6	330.1	333.1	315.9	311.1
57.5°	297.5	304.6	298.7	288.6	283.8
60°	271.4	279.7	270.8	261.3	258.3
62.5°	244.0	253.5	243.5	235.1	231.0
65°	214.9	228.0	216.1	207.8	204.3
67.5°	186.4	200.1	187.6	180.5	178.1
70°	159.7	167.4	161.5	154.4	149.6
72.5°	127.7	135.4	134.2	126.5	123.5
75°	101.5	108.7	106.3	99.8	96.8
77.5°	75.4	83.1	80.8	73.0	71.8
80°	54.0	59.4	55.2	48.1	45.7
82.5°	33.8	38.0	32.7	27.3	26.1
85°	17.8	19.0	15.4	13.7	13.1
87.5°	5.9	6.5	6.5	5.9	5.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)