

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: P259053

Luminaire Tested: **14CZ-LD5-29-SQP-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259053  
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-L83050-W2A1-U-4500K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2010.0 lumens  
Efficiency: N/A  
Efficacy: 86.5 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

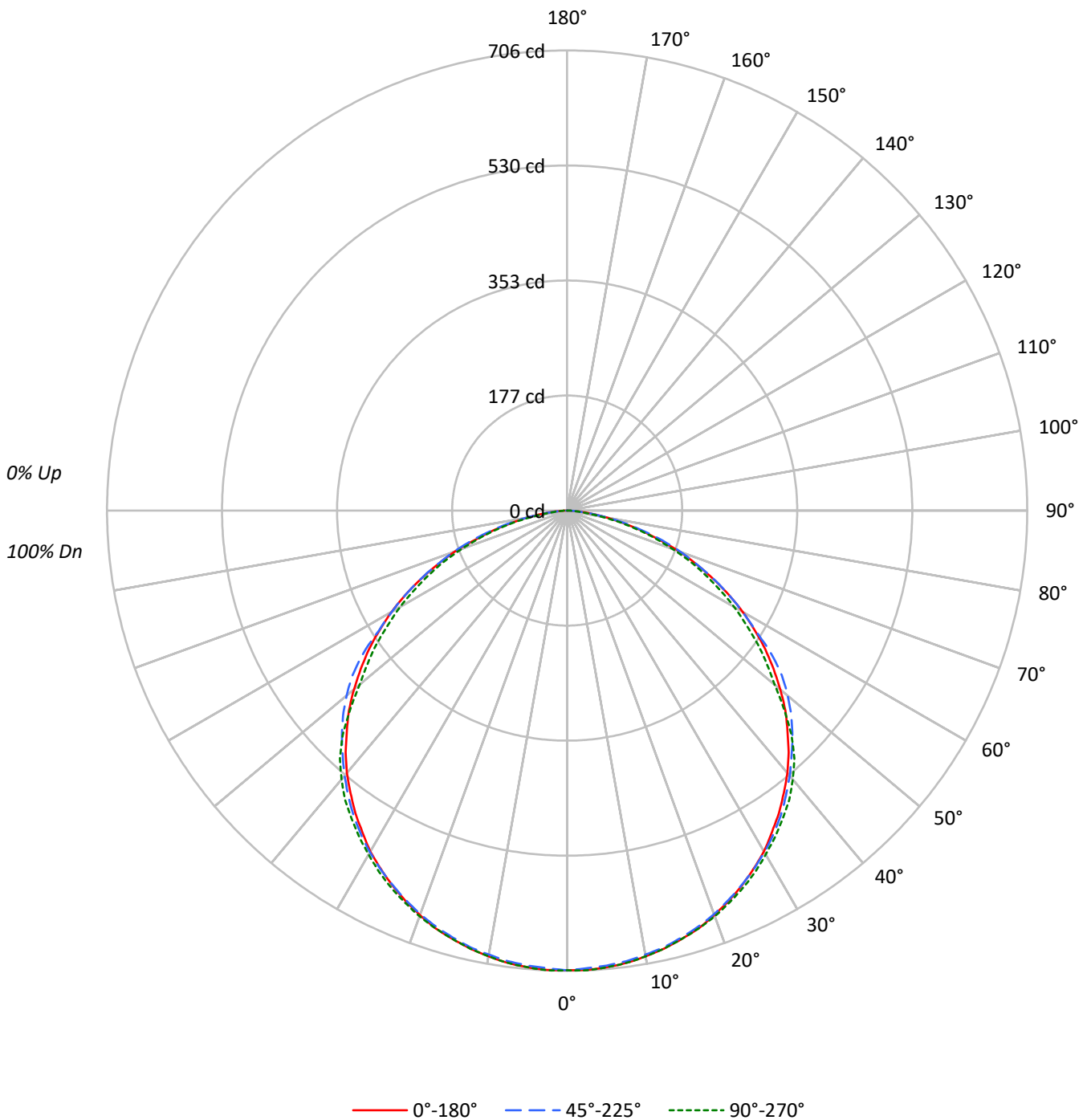
Input Watts (W): 23.25  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1898	1898	1898
5°	1900	1893	1900
10°	1898	1890	1898
15°	1895	1889	1895
20°	1891	1887	1897
25°	1884	1882	1896
30°	1876	1881	1893
35°	1861	1876	1895
40°	1846	1866	1892
45°	1819	1860	1853
50°	1787	1850	1739
55°	1741	1792	1674
60°	1674	1671	1594
65°	1570	1578	1491
70°	1441	1457	1350
75°	1210	1267	1154
80°	961	981	812
85°	630	546	463



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.8	3.3
10°-20°	192.0	9.6
20°-30°	293.2	14.6
30°-40°	357.7	17.8
40°-50°	374.0	18.6
50°-60°	331.1	16.5
60°-70°	243.8	12.1
70°-80°	126.2	6.3
80°-90°	25.2	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°	551.9	27.5
0°-40°	909.6	45.3
0°-60°	1614.8	80.3
0°-90°	2010.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2010.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	705	705	705	705	705	
5°	703	703	701	703	703	67
15°	680	680	678	681	680	192
25°	634	634	634	638	639	293
35°	566	568	571	577	577	354
45°	478	482	489	493	487	369
55°	371	378	382	362	357	331
65°	246	261	248	238	234	244
75°	116	125	122	114	111	124
85°	20	22	18	16	15	26
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	705.3	705.3	705.3	705.3	705.3
2.5°	705.3	705.3	702.6	705.3	706.0
5°	703.3	703.3	700.6	703.3	703.3
7.5°	699.9	699.2	697.2	699.9	699.9
10°	694.5	694.5	691.7	695.1	694.5
12.5°	688.3	687.6	686.3	689.0	688.3
15°	680.2	680.2	678.1	680.8	680.2
17.5°	672.0	671.3	669.3	672.0	672.0
20°	660.4	659.7	659.0	661.8	662.5
22.5°	648.2	647.5	646.8	650.9	650.9
25°	634.5	634.5	633.9	637.9	638.6
27.5°	619.6	619.6	620.2	625.7	625.0
30°	603.9	603.9	605.3	609.3	609.3
32.5°	584.8	586.2	588.9	593.7	593.7
35°	566.5	567.8	571.2	576.7	576.7
37.5°	546.0	548.1	551.5	558.3	559.6
40°	525.6	527.0	531.1	538.5	538.5
42.5°	503.1	504.5	509.9	517.4	516.1
45°	477.9	482.0	488.8	492.9	486.8
47.5°	454.1	456.8	466.4	461.6	451.4
50°	426.9	432.3	441.9	424.8	415.3
52.5°	399.0	405.1	415.3	391.5	386.0
55°	371.1	378.5	381.9	362.2	356.8
57.5°	341.1	349.3	342.5	330.9	325.4
60°	311.1	320.7	310.5	299.6	296.2
62.5°	279.8	290.7	279.1	269.6	264.8
65°	246.5	261.4	247.8	238.3	234.2
67.5°	213.8	229.4	215.1	207.0	204.3
70°	183.1	192.0	185.2	177.0	171.6
72.5°	146.4	155.2	153.9	145.0	141.6
75°	116.4	124.6	121.9	114.4	111.0
77.5°	86.5	95.3	92.6	83.7	82.4
80°	62.0	68.1	63.3	55.1	52.4
82.5°	38.8	43.6	37.4	31.3	30.0
85°	20.4	21.8	17.7	15.7	15.0
87.5°	6.8	7.5	7.5	6.8	6.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)