

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: P258739

Luminaire Tested: **14CZ-LD5-25-S-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258739  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35112)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ-LD5-25-S-UNV-L93050-W2A1-U-3000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1952.0 lumens  
Efficiency: N/A  
Efficacy: 104.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

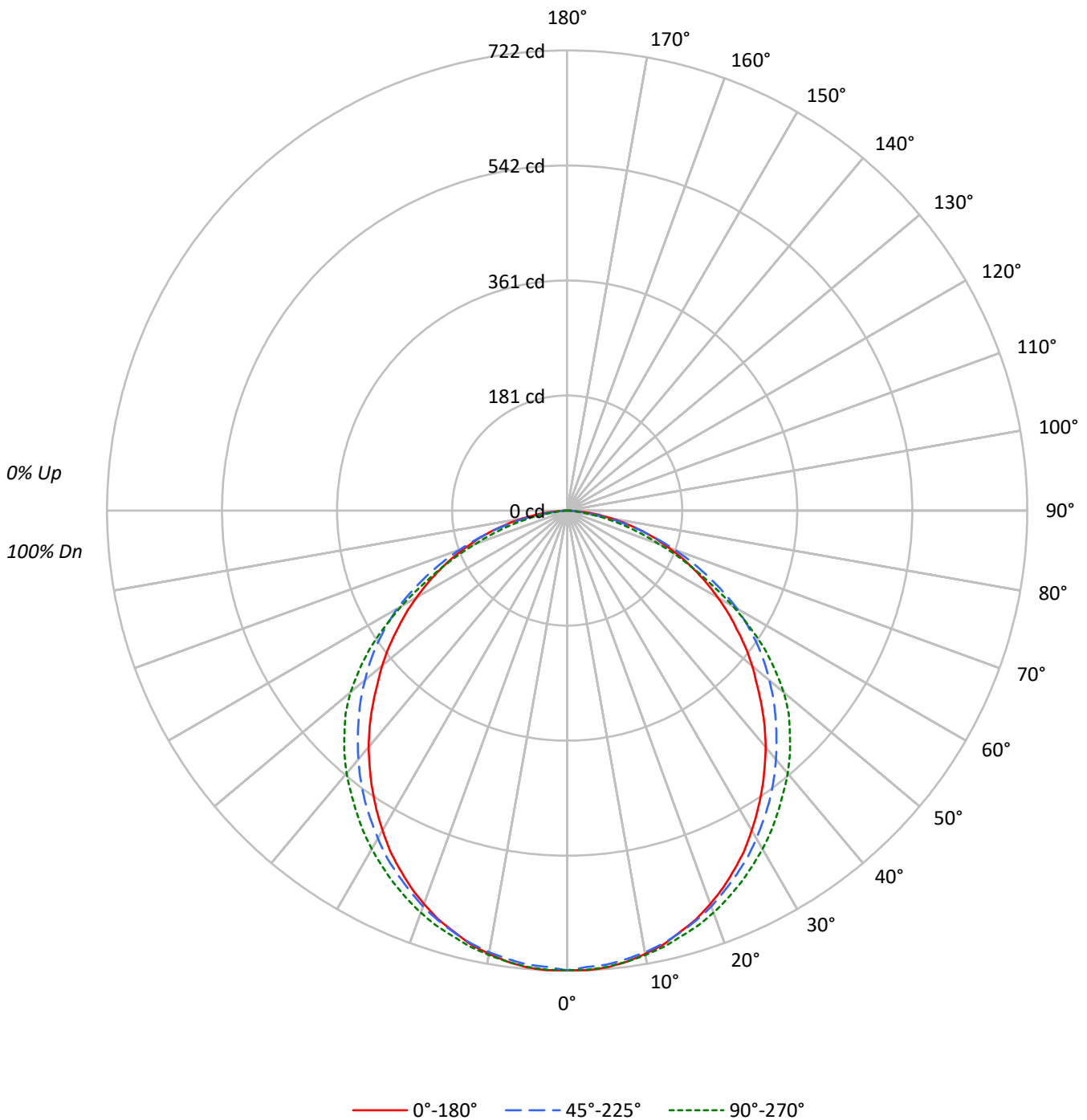
Input Watts (W): 18.693  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	105	100	97	106	102	98	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

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

	0°	45°	90°
0°	1940	1940	1940
5°	1943	1931	1941
10°	1930	1923	1935
15°	1907	1909	1926
20°	1881	1893	1923
25°	1844	1870	1914
30°	1800	1846	1905
35°	1752	1820	1895
40°	1702	1790	1891
45°	1642	1761	1880
50°	1587	1733	1857
55°	1526	1706	1775
60°	1470	1657	1620
65°	1407	1550	1423
70°	1327	1410	1205
75°	1239	1221	995
80°	1093	944	728
85°	858	457	401



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.1	3.5
10°-20°	194.1	9.9
20°-30°	291.3	14.9
30°-40°	347.3	17.8
40°-50°	357.7	18.3
50°-60°	318.8	16.3
60°-70°	229.7	11.8
70°-80°	120.1	6.2
80°-90°	24.9	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°	553.5	28.4
0°-40°	900.8	46.1
0°-60°	1577.3	80.8
0°-90°	1952.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1952.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	721	721	721	721	721	
5°	719	718	715	719	718	68
15°	684	685	685	692	692	193
25°	621	624	630	642	644	286
35°	533	540	554	572	577	333
45°	431	441	463	489	494	333
55°	325	336	364	380	378	292
65°	221	229	244	232	224	219
75°	119	125	117	102	96	126
85°	28	24	15	13	13	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	721.1	721.1	721.1	721.1	721.1
2.5°	721.9	720.2	716.7	721.1	721.1
5°	719.3	717.6	715.0	719.3	718.5
7.5°	714.1	712.4	709.8	715.0	714.1
10°	706.3	705.4	703.7	708.9	708.0
12.5°	697.6	696.7	695.8	701.1	701.1
15°	684.5	685.4	685.4	692.4	691.5
17.5°	672.4	673.2	674.1	682.8	682.8
20°	656.7	657.6	661.1	670.6	671.5
22.5°	640.2	641.0	645.4	656.7	658.4
25°	621.0	624.5	629.7	641.9	644.5
27.5°	601.9	604.5	613.2	627.1	628.9
30°	579.3	584.5	594.1	609.7	613.2
32.5°	556.7	562.8	574.1	591.5	595.8
35°	533.2	540.1	554.1	572.3	576.7
37.5°	508.8	514.9	532.3	551.5	557.5
40°	484.5	490.6	509.7	531.5	538.4
42.5°	458.4	467.1	486.2	510.6	517.5
45°	431.4	441.0	462.7	488.8	494.1
47.5°	403.6	414.0	439.3	465.3	471.4
50°	379.2	388.8	414.0	439.3	443.6
52.5°	353.1	361.8	389.7	410.5	411.4
55°	325.3	335.7	363.6	380.1	378.4
57.5°	300.1	308.8	335.7	344.4	339.2
60°	273.1	280.9	307.9	308.8	301.0
62.5°	247.0	254.9	275.7	269.6	260.1
65°	220.9	228.8	243.5	232.2	223.5
67.5°	195.7	202.7	211.4	196.6	187.9
70°	168.7	178.3	179.2	161.8	153.1
72.5°	145.3	150.5	148.7	132.2	124.4
75°	119.2	125.3	117.4	101.8	95.7
77.5°	94.8	99.2	88.7	73.9	69.6
80°	70.5	73.1	60.9	49.6	47.0
82.5°	47.8	47.8	34.8	27.0	24.4
85°	27.8	24.4	14.8	13.0	13.0
87.5°	9.6	6.1	6.1	6.1	6.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)