

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: P230517

Luminaire Tested: **24CZ-LD5-50SE-RDP-UNV-L935-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230517  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25696)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-50SE-RDP-UNV-L935-CD1-U  
Description: CRUZE 2x4 LED TROFFER  
WITH RDP LENS  
Light Source: (84) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2883.6 lumens  
Efficiency: N/A  
Efficacy: 61.9 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

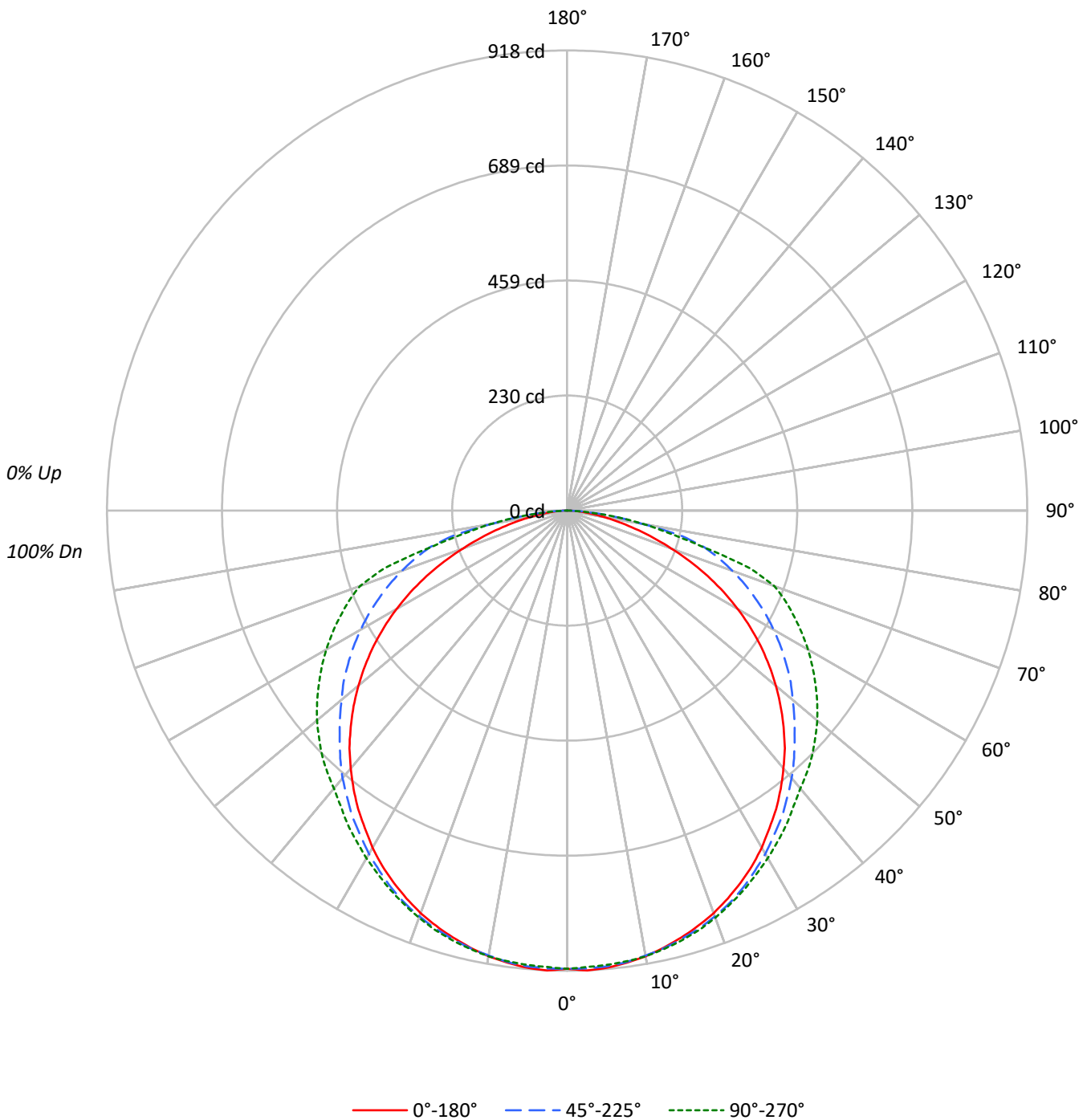
Input Watts (W): 46.56  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	61	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	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	61	48	40	34	47	39	34	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	27
9	55	41	33	27	53	41	32	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°	1230	1230	1230
5°	1237	1233	1229
10°	1233	1231	1233
15°	1228	1232	1236
20°	1224	1234	1238
25°	1216	1233	1239
30°	1206	1228	1244
35°	1194	1226	1254
40°	1179	1224	1271
45°	1161	1221	1315
50°	1138	1230	1364
55°	1106	1252	1418
60°	1058	1280	1493
65°	985	1320	1591
70°	871	1379	1731
75°	730	1476	1454
80°	583	1166	1210
85°	460	789	722



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.7	3.0
10°-20°	249.5	8.7
20°-30°	381.1	13.2
30°-40°	465.9	16.2
40°-50°	498.7	17.3
50°-60°	478.4	16.6
60°-70°	403.9	14.0
70°-80°	258.2	9.0
80°-90°	61.1	2.1
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°	717.3	24.9
0°-40°	1183.3	41.0
0°-60°	2160.4	74.9
0°-90°	2883.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2883.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	914	914	914	914	914	
5°	916	910	913	911	910	87
15°	882	879	884	887	887	249
25°	819	818	830	833	835	377
35°	727	732	747	757	764	454
45°	610	620	642	671	691	471
55°	471	487	534	582	605	421
65°	309	339	414	473	500	305
75°	140	200	284	290	280	151
85°	30	50	51	50	47	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	914.1	914.1	914.1	914.1	914.1
2.5°	918.4	912.7	914.1	914.1	911.3
5°	915.5	909.9	912.7	911.3	909.9
7.5°	909.9	905.6	908.4	908.4	907.0
10°	902.8	898.5	901.3	902.8	902.8
12.5°	892.8	890.0	894.2	894.2	895.7
15°	881.5	878.6	884.3	887.1	887.1
17.5°	868.7	867.3	874.4	875.8	877.2
20°	854.5	853.1	861.6	861.6	864.4
22.5°	837.5	836.0	847.4	847.4	850.2
25°	819.0	817.6	830.4	833.2	834.6
27.5°	799.1	797.7	810.5	814.8	817.6
30°	776.4	776.4	790.6	796.3	800.6
32.5°	750.9	755.1	767.9	776.4	782.1
35°	726.8	732.4	746.6	756.6	763.7
37.5°	699.8	705.5	721.1	733.8	742.4
40°	671.4	678.5	696.9	711.1	723.9
42.5°	643.0	650.1	670.0	691.3	708.3
45°	610.4	620.3	641.6	671.4	691.3
47.5°	577.7	587.6	614.6	651.5	671.4
50°	543.6	555.0	587.6	630.2	651.5
52.5°	508.2	520.9	562.1	607.5	628.8
55°	471.3	486.9	533.7	582.0	604.7
57.5°	432.9	450.0	505.3	556.4	580.5
60°	393.2	414.5	475.5	529.4	555.0
62.5°	352.0	377.6	445.7	501.1	528.0
65°	309.4	339.2	414.5	472.7	499.6
67.5°	265.4	305.2	383.2	444.3	471.3
70°	221.4	268.3	350.6	413.1	440.0
72.5°	180.3	234.2	318.0	376.2	381.8
75°	140.5	200.1	283.9	289.6	279.6
77.5°	105.0	166.1	234.2	208.7	207.2
80°	75.2	133.4	150.5	154.7	156.1
82.5°	49.7	100.8	97.9	100.8	99.4
85°	29.8	49.7	51.1	49.7	46.8
87.5°	14.2	18.5	14.2	12.8	11.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)