

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: P277057

Luminaire Tested: **24CZ2-50HE-RDP-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277057  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-50HE-RDP-UNV-L92765-W2A1-U-4500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2897.4 lumens  
Efficiency: N/A  
Efficacy: 79.7 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

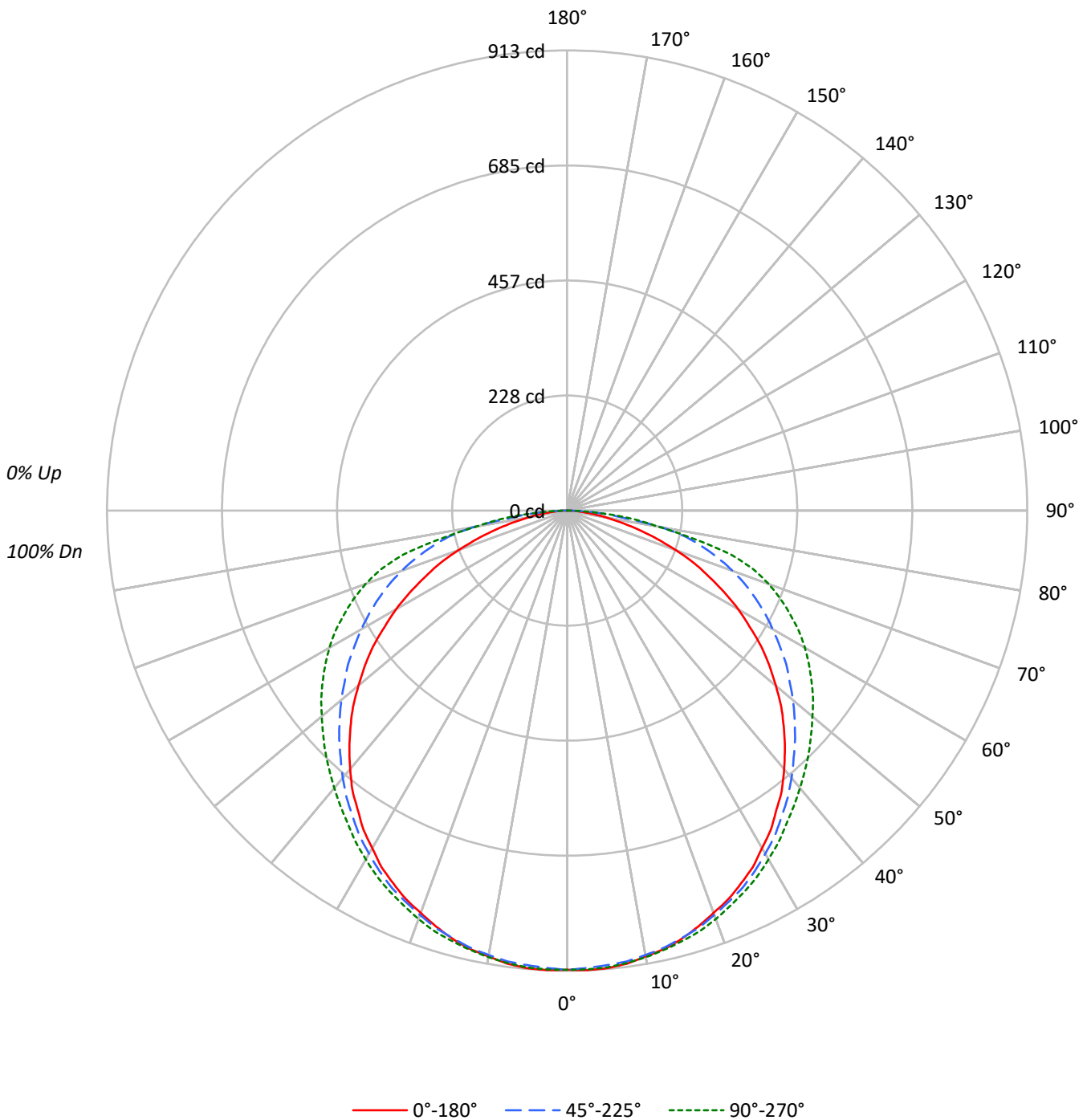
Input Watts (W): 36.363  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	68	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

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

	0°	45°	90°
0°	1226	1226	1226
5°	1231	1223	1229
10°	1227	1223	1229
15°	1225	1223	1231
20°	1216	1222	1235
25°	1212	1225	1238
30°	1201	1221	1242
35°	1190	1218	1246
40°	1176	1217	1262
45°	1157	1217	1291
50°	1131	1224	1330
55°	1103	1244	1389
60°	1056	1269	1466
65°	988	1313	1556
70°	899	1374	1674
75°	762	1449	1748
80°	601	1459	1414
85°	443	1110	1243



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.4	3.0
10°-20°	248.8	8.6
20°-30°	380.4	13.1
30°-40°	465.0	16.0
40°-50°	495.6	17.1
50°-60°	473.9	16.4
60°-70°	401.4	13.9
70°-80°	269.8	9.3
80°-90°	76.1	2.6
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°	715.6	24.7
0°-40°	1180.6	40.7
0°-60°	2150.1	74.2
0°-90°	2897.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2897.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	911	911	911	911	911	
5°	911	910	905	910	910	87
15°	880	880	878	885	884	248
25°	816	819	825	832	834	376
35°	724	730	742	756	759	454
45°	608	618	640	667	678	469
55°	470	487	530	572	592	419
65°	310	342	412	467	489	308
75°	147	200	279	326	336	157
85°	29	59	72	78	80	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	911.2	911.2	911.2	911.2	911.2
2.5°	912.6	912.6	908.3	911.2	911.2
5°	911.2	909.7	905.4	909.7	909.7
7.5°	906.9	905.4	902.5	906.9	905.4
10°	898.2	898.2	895.4	899.7	899.7
12.5°	891.0	889.6	888.2	893.9	892.5
15°	879.5	879.5	878.1	885.3	883.9
17.5°	865.2	866.6	868.1	873.8	875.2
20°	849.4	852.2	853.7	862.3	862.3
22.5°	835.0	836.4	839.3	847.9	847.9
25°	816.3	819.2	824.9	832.1	833.6
27.5°	797.6	799.1	806.3	816.3	817.8
30°	773.2	777.5	786.1	797.6	799.1
32.5°	751.6	756.0	766.0	777.5	780.4
35°	724.3	730.1	741.6	756.0	758.8
37.5°	699.9	704.2	718.6	734.4	738.7
40°	669.7	678.3	692.7	711.4	718.6
42.5°	639.5	648.2	665.4	689.8	698.5
45°	607.9	618.0	639.5	666.8	678.3
47.5°	576.3	587.8	612.2	643.9	656.8
50°	540.4	554.7	584.9	620.9	635.2
52.5°	505.9	523.1	556.2	596.4	615.1
55°	470.0	487.2	530.3	572.0	592.1
57.5°	429.7	452.7	500.1	547.6	569.1
60°	392.3	413.9	471.4	523.1	544.7
62.5°	352.1	380.9	442.6	497.3	518.8
65°	310.4	342.0	412.5	467.1	488.6
67.5°	273.1	307.6	382.3	436.9	458.5
70°	228.5	271.6	349.2	403.8	425.4
72.5°	186.8	234.3	314.7	367.9	388.0
75°	146.6	199.8	278.8	326.2	336.3
77.5°	109.2	165.3	241.4	261.6	254.4
80°	77.6	132.2	188.3	178.2	182.5
82.5°	50.3	100.6	116.4	132.2	136.5
85°	28.7	58.9	71.9	77.6	80.5
87.5°	12.9	21.6	28.7	28.7	27.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)