

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: P276920

Luminaire Tested: **24CZ2-50HE-RDP-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276920  
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-L82765-W2A1-U-3500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3123.3 lumens  
Efficiency: N/A  
Efficacy: 87.0 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

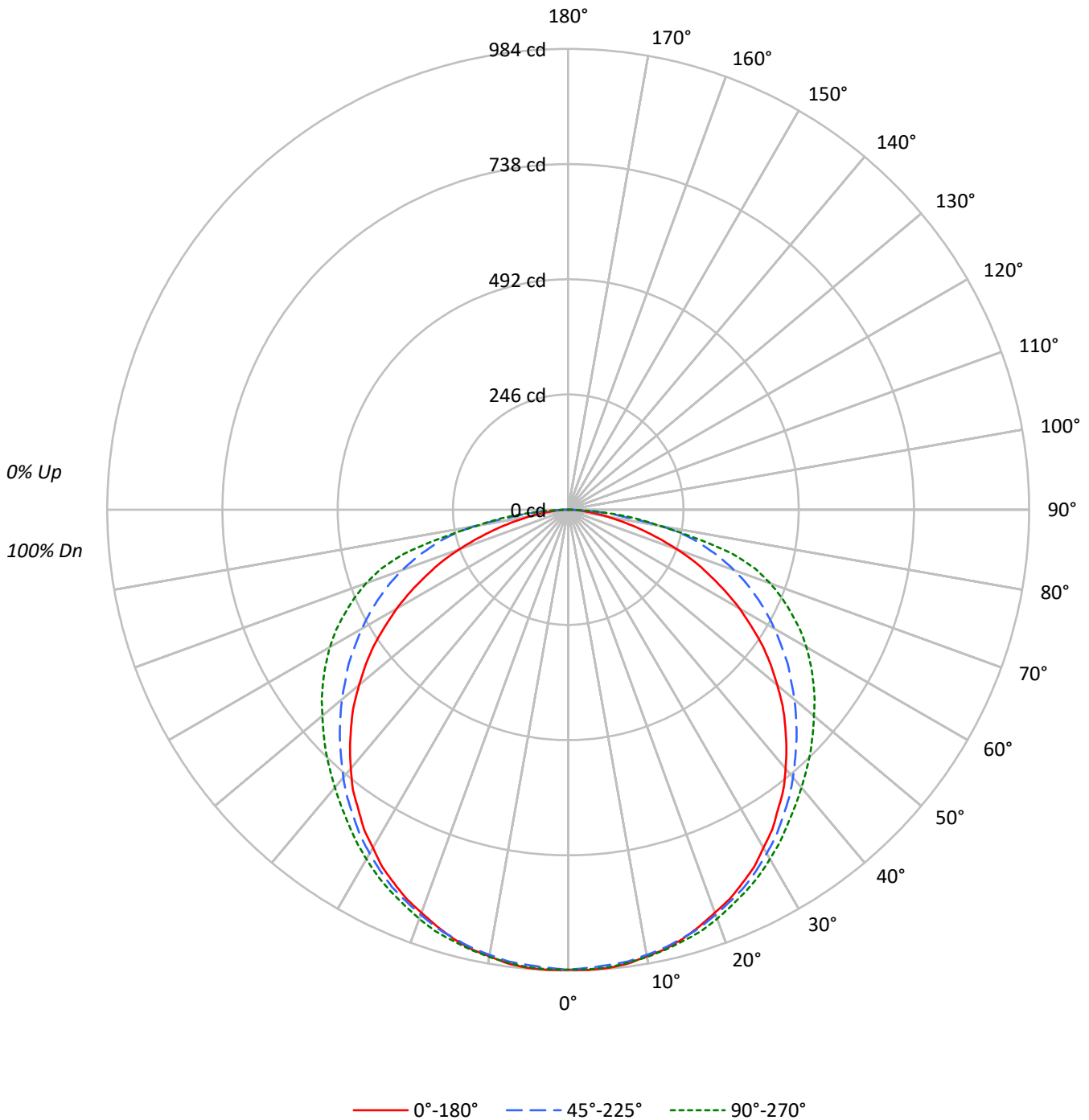
Input Watts (W): 35.898  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82					82			
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67					67			
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56					56			
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47					47			
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40					40			
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35					35			
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31					31			
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27					27			
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24					24			
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22					22			

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

	0°	45°	90°
0°	1322	1322	1322
5°	1327	1318	1324
10°	1323	1319	1325
15°	1321	1319	1327
20°	1311	1318	1331
25°	1306	1320	1334
30°	1295	1317	1338
35°	1282	1313	1344
40°	1268	1312	1361
45°	1247	1312	1391
50°	1219	1320	1433
55°	1188	1341	1497
60°	1138	1367	1580
65°	1065	1415	1677
70°	969	1481	1804
75°	821	1562	1884
80°	649	1572	1524
85°	479	1196	1340



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.2	3.0
10°-20°	268.1	8.6
20°-30°	410.0	13.1
30°-40°	501.3	16.0
40°-50°	534.3	17.1
50°-60°	510.8	16.4
60°-70°	432.7	13.9
70°-80°	290.8	9.3
80°-90°	82.0	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°	771.4	24.7
0°-40°	1272.6	40.7
0°-60°	2317.7	74.2
0°-90°	3123.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3123.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	982	982	982	982	982	
5°	982	981	976	981	981	93
15°	948	948	947	954	953	267
25°	880	883	889	897	898	406
35°	781	787	799	815	818	489
45°	655	666	689	719	731	505
55°	507	525	572	617	638	451
65°	335	369	445	504	527	332
75°	158	215	300	352	362	169
85°	31	64	78	84	87	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	982.2	982.2	982.2	982.2	982.2
2.5°	983.7	983.7	979.1	982.2	982.2
5°	982.2	980.6	976.0	980.6	980.6
7.5°	977.5	976.0	972.9	977.5	976.0
10°	968.3	968.3	965.2	969.8	969.8
12.5°	960.5	959.0	957.4	963.6	962.1
15°	948.1	948.1	946.6	954.3	952.8
17.5°	932.6	934.2	935.7	941.9	943.5
20°	915.6	918.7	920.2	929.5	929.5
22.5°	900.1	901.6	904.7	914.0	914.0
25°	879.9	883.0	889.2	897.0	898.5
27.5°	859.8	861.4	869.1	879.9	881.5
30°	833.5	838.1	847.4	859.8	861.4
32.5°	810.2	814.9	825.7	838.1	841.2
35°	780.8	787.0	799.4	814.9	818.0
37.5°	754.5	759.1	774.6	791.6	796.3
40°	721.9	731.2	746.7	766.9	774.6
42.5°	689.4	698.7	717.3	743.6	752.9
45°	655.3	666.2	689.4	718.8	731.2
47.5°	621.2	633.6	660.0	694.0	708.0
50°	582.5	598.0	630.5	669.3	684.7
52.5°	545.3	563.9	599.5	642.9	663.1
55°	506.6	525.2	571.7	616.6	638.3
57.5°	463.2	488.0	539.1	590.2	613.5
60°	422.9	446.2	508.1	563.9	587.1
62.5°	379.6	410.5	477.2	536.0	559.3
65°	334.6	368.7	444.6	503.5	526.7
67.5°	294.3	331.5	412.1	471.0	494.2
70°	246.3	292.8	376.5	435.3	458.6
72.5°	201.4	252.5	339.3	396.6	418.3
75°	158.0	215.3	300.5	351.7	362.5
77.5°	117.7	178.2	260.3	282.0	274.2
80°	83.7	142.5	202.9	192.1	196.7
82.5°	54.2	108.4	125.5	142.5	147.2
85°	31.0	63.5	77.5	83.7	86.8
87.5°	13.9	23.2	31.0	31.0	29.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)