

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: P474221

Luminaire Tested: **24CZ2-40HE-RDP-UNV-L835-CD1-U**

Issue Date: 01/28/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474221  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/28/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-40HE-RDP-UNV-L835-CD1-U  
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS W/ RDP INSERT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2776.5 lumens  
Efficiency: N/A  
Efficacy: 90.4 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

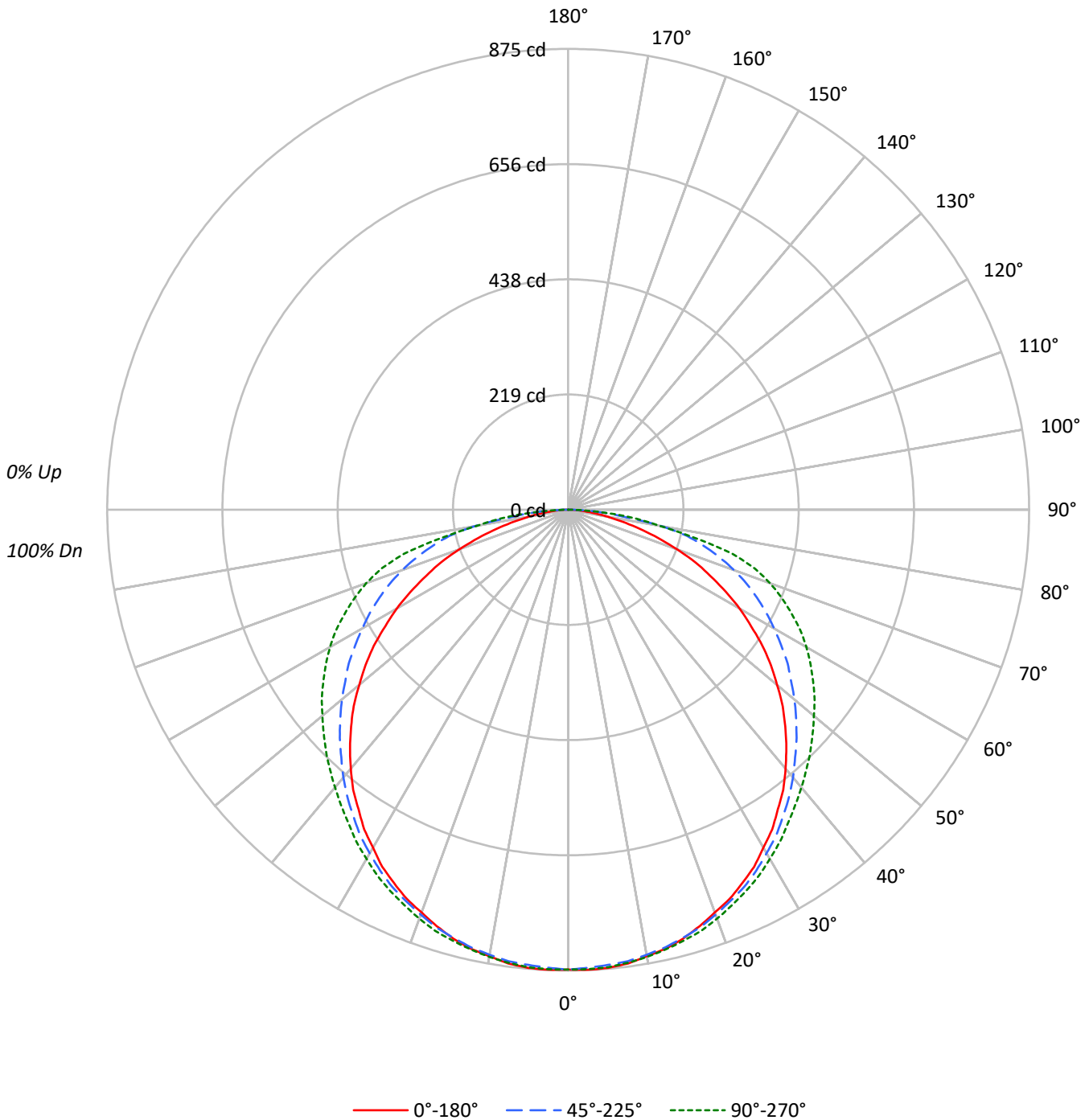
Input Watts (W): 30.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	67	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°	1175	1175	1175
5°	1179	1172	1177
10°	1176	1172	1178
15°	1174	1172	1180
20°	1165	1171	1183
25°	1161	1174	1186
30°	1151	1170	1190
35°	1140	1167	1194
40°	1127	1166	1209
45°	1109	1166	1237
50°	1084	1173	1274
55°	1056	1192	1331
60°	1012	1216	1405
65°	947	1258	1491
70°	861	1317	1603
75°	730	1389	1675
80°	576	1398	1355
85°	426	1064	1192



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.8	3.0
10°-20°	238.4	8.6
20°-30°	364.5	13.1
30°-40°	445.6	16.0
40°-50°	474.9	17.1
50°-60°	454.1	16.4
60°-70°	384.7	13.9
70°-80°	258.5	9.3
80°-90°	73.0	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°	685.7	24.7
0°-40°	1131.3	40.7
0°-60°	2060.4	74.2
0°-90°	2776.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2776.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	873	873	873	873	873	
5°	873	872	868	872	872	83
15°	843	843	842	848	847	238
25°	782	785	790	797	799	361
35°	694	700	711	724	727	435
45°	583	592	613	639	650	449
55°	450	467	508	548	567	401
65°	298	328	395	448	468	295
75°	140	191	267	313	322	150
85°	28	56	69	74	77	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	873.2	873.2	873.2	873.2	873.2
2.5°	874.6	874.6	870.4	873.2	873.2
5°	873.2	871.8	867.7	871.8	871.8
7.5°	869.0	867.7	864.9	869.0	867.7
10°	860.8	860.8	858.0	862.2	862.2
12.5°	853.9	852.5	851.1	856.6	855.3
15°	842.9	842.9	841.5	848.4	847.0
17.5°	829.1	830.5	831.8	837.4	838.7
20°	813.9	816.7	818.1	826.3	826.3
22.5°	800.1	801.5	804.3	812.6	812.6
25°	782.2	785.0	790.5	797.4	798.8
27.5°	764.3	765.7	772.6	782.2	783.6
30°	740.9	745.0	753.3	764.3	765.7
32.5°	720.2	724.4	734.0	745.0	747.8
35°	694.1	699.6	710.6	724.4	727.1
37.5°	670.6	674.8	688.5	703.7	707.8
40°	641.8	650.0	663.7	681.6	688.5
42.5°	612.9	621.2	637.7	661.0	669.2
45°	582.6	592.2	612.9	639.1	650.0
47.5°	552.3	563.3	586.7	617.0	629.4
50°	517.8	531.6	560.5	595.0	608.8
52.5°	484.7	501.3	533.0	571.6	589.5
55°	450.3	466.8	508.2	548.1	567.4
57.5°	411.7	433.8	479.2	524.7	545.4
60°	376.0	396.6	451.7	501.3	522.0
62.5°	337.4	365.0	424.1	476.5	497.1
65°	297.5	327.8	395.2	447.5	468.2
67.5°	261.7	294.7	366.4	418.6	439.3
70°	218.9	260.3	334.7	386.9	407.6
72.5°	179.0	224.5	301.6	352.6	371.9
75°	140.4	191.4	267.2	312.6	322.3
77.5°	104.7	158.3	231.4	250.6	243.8
80°	74.4	126.8	180.4	170.7	174.9
82.5°	48.2	96.5	111.6	126.8	130.8
85°	27.6	56.5	68.9	74.4	77.2
87.5°	12.4	20.7	27.6	27.6	26.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)