

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: P474170

Luminaire Tested: **24CZ2-35HE-RDP-UNV-L830-CD1-U**

Issue Date: 01/28/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474170  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/28/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-35HE-RDP-UNV-L830-CD1-U  
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS W/ RDP INSERT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2382.6 lumens  
Efficiency: N/A  
Efficacy: 88.2 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

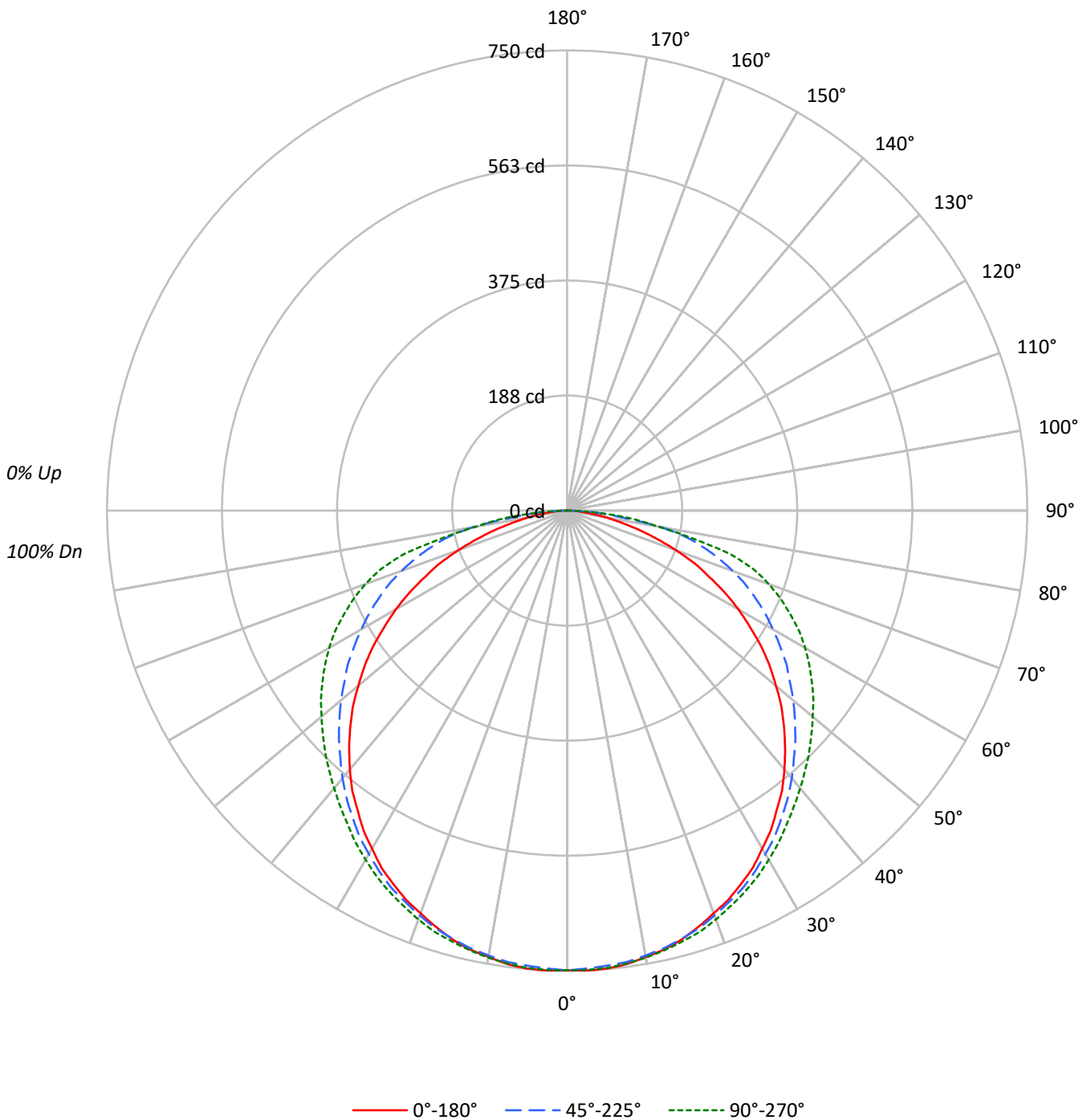
Input Watts (W): 27  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1008	1008	1008
5°	1012	1006	1010
10°	1009	1006	1011
15°	1008	1006	1012
20°	1000	1005	1015
25°	996	1007	1018
30°	988	1004	1021
35°	978	1002	1025
40°	967	1000	1038
45°	951	1001	1061
50°	930	1007	1093
55°	906	1023	1142
60°	868	1043	1205
65°	813	1080	1279
70°	739	1130	1376
75°	626	1192	1438
80°	494	1199	1162
85°	364	912	1022



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.1	3.0
10°-20°	204.6	8.6
20°-30°	312.8	13.1
30°-40°	382.4	16.0
40°-50°	407.6	17.1
50°-60°	389.7	16.4
60°-70°	330.1	13.9
70°-80°	221.9	9.3
80°-90°	62.6	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°	588.4	24.7
0°-40°	970.8	40.7
0°-60°	1768.0	74.2
0°-90°	2382.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2382.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	749	749	749	749	749	
5°	749	748	745	748	748	71
15°	723	723	722	728	727	204
25°	671	674	678	684	685	309
35°	596	600	610	622	624	373
45°	500	508	526	548	558	386
55°	386	401	436	470	487	344
65°	255	281	339	384	402	253
75°	120	164	229	268	277	129
85°	24	48	59	64	66	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	749.3	749.3	749.3	749.3	749.3
2.5°	750.5	750.5	746.9	749.3	749.3
5°	749.3	748.1	744.6	748.1	748.1
7.5°	745.7	744.6	742.2	745.7	744.6
10°	738.6	738.6	736.3	739.8	739.8
12.5°	732.7	731.6	730.4	735.1	733.9
15°	723.3	723.3	722.1	728.0	726.8
17.5°	711.5	712.6	713.8	718.5	719.7
20°	698.4	700.8	702.0	709.1	709.1
22.5°	686.6	687.8	690.2	697.3	697.3
25°	671.2	673.6	678.3	684.3	685.4
27.5°	655.9	657.1	663.0	671.2	672.4
30°	635.8	639.3	646.4	655.9	657.1
32.5°	618.0	621.6	629.9	639.3	641.7
35°	595.6	600.3	609.8	621.6	624.0
37.5°	575.5	579.0	590.8	603.9	607.4
40°	550.8	557.7	569.6	584.9	590.8
42.5°	525.9	533.0	547.2	567.2	574.3
45°	499.9	508.2	525.9	548.4	557.7
47.5°	473.9	483.4	503.5	529.5	540.1
50°	444.3	456.2	481.0	510.6	522.4
52.5°	416.0	430.2	457.4	490.5	505.8
55°	386.4	400.6	436.1	470.4	486.9
57.5°	353.3	372.2	411.2	450.3	468.0
60°	322.7	340.3	387.6	430.2	447.9
62.5°	289.6	313.2	363.9	408.9	426.6
65°	255.3	281.3	339.1	384.0	401.8
67.5°	224.5	252.9	314.4	359.2	376.9
70°	187.9	223.4	287.2	332.0	349.8
72.5°	153.6	192.6	258.8	302.6	319.1
75°	120.5	164.2	229.3	268.3	276.6
77.5°	89.9	135.9	198.5	215.1	209.2
80°	63.8	108.8	154.8	146.5	150.0
82.5°	41.4	82.8	95.8	108.8	112.2
85°	23.6	48.5	59.1	63.8	66.2
87.5°	10.6	17.7	23.6	23.6	22.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)