

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: P474827

Luminaire Tested: **22CZ2-34HE-UNV-L840-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474827  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-34HE-UNV-L840-CD1-U  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY,RIBBED LENS  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3491.0 lumens  
Efficiency: N/A  
Efficacy: 143.7 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

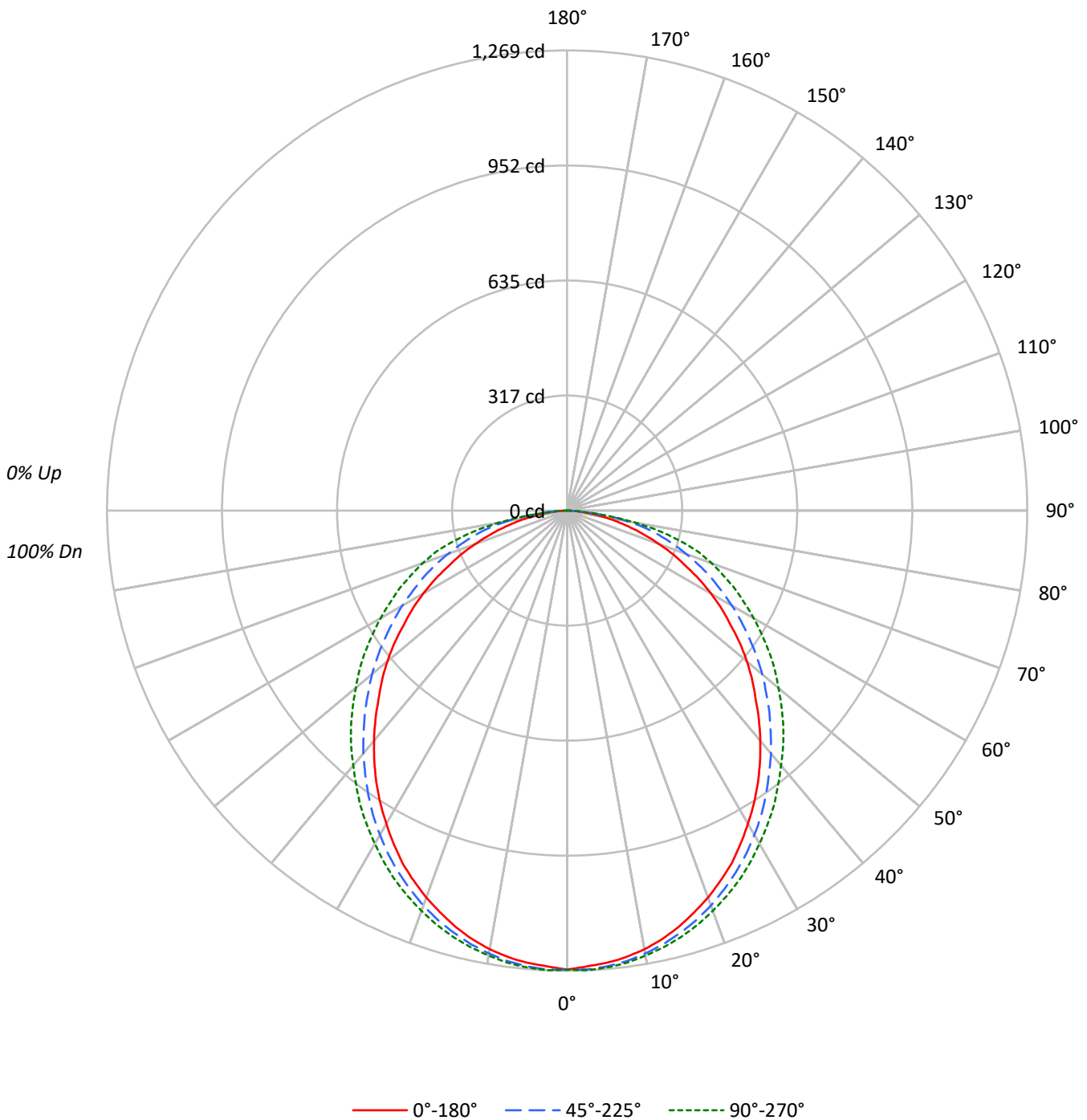
Input Watts (W): 24.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	73	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	3407	3407	3407
5°	3382	3408	3416
10°	3357	3389	3405
15°	3311	3358	3389
20°	3251	3319	3363
25°	3187	3268	3336
30°	3100	3210	3297
35°	3012	3141	3265
40°	2910	3071	3224
45°	2799	3001	3209
50°	2709	2941	3184
55°	2582	2876	3191
60°	2466	2827	3200
65°	2292	2790	3251
70°	2119	2751	3332
75°	1894	2739	3352
80°	1588	2596	2927
85°	1229	1775	1664



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.6	3.4
10°-20°	339.5	9.7
20°-30°	506.3	14.5
30°-40°	597.6	17.1
40°-50°	609.1	17.4
50°-60°	549.3	15.7
60°-70°	431.7	12.4
70°-80°	270.3	7.7
80°-90°	67.4	1.9
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°	965.4	27.7
0°-40°	1563.1	44.8
0°-60°	2721.5	78.0
0°-90°	3491.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3491.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1266	1266	1266	1266	1266	
5°	1252	1255	1262	1264	1264	119
15°	1188	1194	1206	1214	1217	335
25°	1073	1082	1101	1118	1124	493
35°	917	929	956	983	994	573
45°	736	752	789	827	843	569
55°	550	567	613	660	680	494
65°	360	382	438	487	510	359
75°	182	210	263	311	322	194
85°	40	51	58	58	54	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1266.0	1266.0	1266.0	1266.0	1266.0
2.5°	1257.9	1260.8	1266.7	1269.0	1269.0
5°	1252.0	1254.9	1261.6	1264.5	1264.5
7.5°	1242.4	1245.3	1253.5	1257.1	1257.9
10°	1228.4	1232.1	1240.2	1246.1	1246.1
12.5°	1210.7	1214.4	1224.7	1232.1	1232.8
15°	1188.5	1193.7	1205.5	1214.4	1216.6
17.5°	1162.7	1170.8	1184.1	1195.2	1197.4
20°	1135.4	1143.5	1159.0	1171.6	1174.5
22.5°	1105.2	1112.5	1131.0	1146.5	1150.2
25°	1073.4	1081.6	1100.7	1117.7	1123.6
27.5°	1035.8	1045.4	1068.3	1087.5	1093.4
30°	997.5	1009.3	1032.9	1054.3	1060.9
32.5°	958.4	969.4	996.0	1018.9	1027.7
35°	917.0	928.8	956.1	982.7	993.8
37.5°	873.5	885.3	914.8	945.1	955.4
40°	828.5	842.5	874.2	906.7	917.8
42.5°	782.8	797.5	830.7	866.9	881.6
45°	735.5	751.8	788.7	827.0	843.3
47.5°	692.8	706.0	744.4	786.5	801.9
50°	647.0	659.6	702.4	744.4	760.6
52.5°	600.5	612.3	658.1	702.4	722.3
55°	550.4	567.3	613.1	660.3	680.2
57.5°	506.1	521.6	568.8	616.8	636.0
60°	458.2	474.4	525.3	574.0	594.6
62.5°	410.2	427.9	479.5	531.9	551.1
65°	360.0	382.2	438.2	486.9	510.5
67.5°	317.2	338.6	394.0	444.9	465.5
70°	269.3	294.4	349.7	401.3	423.5
72.5°	224.3	249.4	306.2	357.8	379.9
75°	182.2	209.5	263.4	310.6	322.4
77.5°	141.7	167.5	221.3	248.6	261.2
80°	102.5	127.6	167.5	185.9	188.9
82.5°	69.3	90.7	113.6	118.8	115.8
85°	39.8	50.9	57.5	57.5	53.9
87.5°	16.2	16.2	14.0	8.9	5.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)