

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: P474283

Luminaire Tested: **24CZ2-35VHE-RDP-UNV-L840-CD1-U**

Issue Date: 01/28/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474283  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/28/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-35VHE-RDP-UNV-L840-CD1-U  
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ RDP  
INSERT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2418.2 lumens  
Efficiency: N/A  
Efficacy: 101.2 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

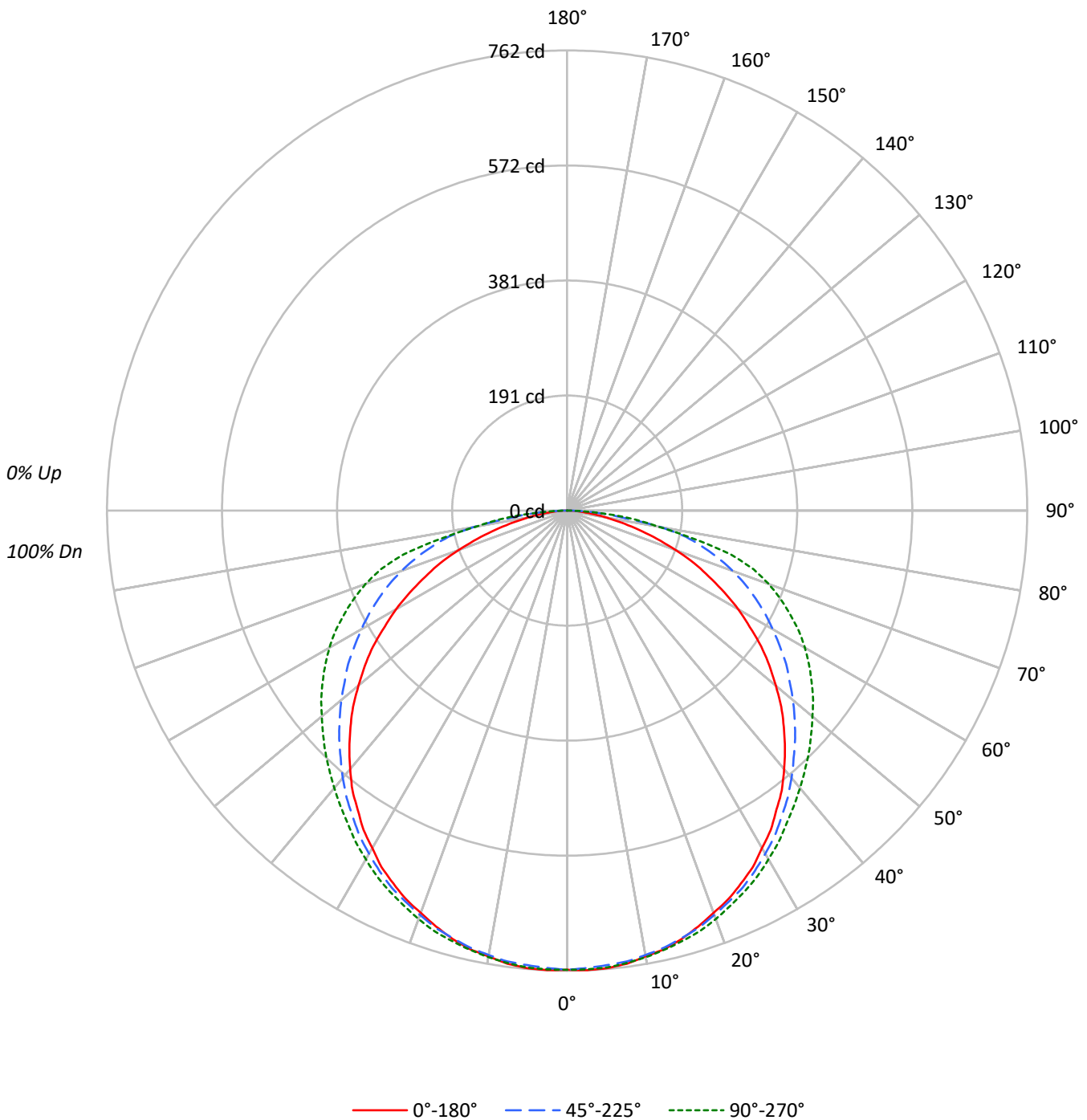
Input Watts (W): 23.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1023	1023	1023
5°	1027	1021	1026
10°	1024	1021	1026
15°	1023	1021	1028
20°	1015	1020	1030
25°	1011	1022	1033
30°	1003	1019	1036
35°	993	1017	1040
40°	982	1015	1053
45°	965	1016	1077
50°	944	1022	1110
55°	920	1038	1159
60°	881	1059	1223
65°	825	1096	1298
70°	750	1147	1397
75°	636	1210	1459
80°	502	1217	1180
85°	371	926	1037



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.1	3.0
10°-20°	207.6	8.6
20°-30°	317.5	13.1
30°-40°	388.1	16.0
40°-50°	413.7	17.1
50°-60°	395.5	16.4
60°-70°	335.0	13.9
70°-80°	225.2	9.3
80°-90°	63.5	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°	597.2	24.7
0°-40°	985.3	40.7
0°-60°	1794.5	74.2
0°-90°	2418.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2418.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	760	760	760	760	760	
5°	760	759	756	759	759	72
15°	734	734	733	739	738	207
25°	681	684	688	694	696	314
35°	604	609	619	631	633	379
45°	507	516	534	557	566	391
55°	392	407	443	477	494	349
65°	259	286	344	390	408	257
75°	122	167	233	272	281	131
85°	24	49	60	65	67	30
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	760.5	760.5	760.5	760.5	760.5
2.5°	761.7	761.7	758.1	760.5	760.5
5°	760.5	759.3	755.7	759.3	759.3
7.5°	756.9	755.7	753.3	756.9	755.7
10°	749.7	749.7	747.3	750.9	750.9
12.5°	743.7	742.5	741.3	746.1	744.9
15°	734.1	734.1	732.9	738.9	737.7
17.5°	722.1	723.3	724.5	729.3	730.5
20°	708.9	711.3	712.5	719.7	719.7
22.5°	696.9	698.1	700.5	707.7	707.7
25°	681.3	683.7	688.5	694.5	695.7
27.5°	665.7	666.9	672.9	681.3	682.5
30°	645.3	648.9	656.1	665.7	666.9
32.5°	627.3	630.9	639.3	648.9	651.3
35°	604.5	609.3	618.9	630.9	633.3
37.5°	584.1	587.7	599.7	612.9	616.5
40°	559.0	566.1	578.1	593.7	599.7
42.5°	533.8	541.0	555.4	575.7	582.9
45°	507.4	515.8	533.8	556.6	566.1
47.5°	481.0	490.6	511.0	537.4	548.2
50°	451.0	463.0	488.2	518.2	530.2
52.5°	422.2	436.6	464.2	497.8	513.4
55°	392.2	406.6	442.6	477.4	494.2
57.5°	358.6	377.8	417.4	457.0	475.0
60°	327.5	345.4	393.4	436.6	454.6
62.5°	293.9	317.9	369.4	415.0	433.0
65°	259.1	285.5	344.2	389.8	407.8
67.5°	227.9	256.7	319.1	364.6	382.6
70°	190.7	226.7	291.5	337.0	355.0
72.5°	155.9	195.5	262.7	307.1	323.9
75°	122.3	166.7	232.7	272.3	280.7
77.5°	91.2	137.9	201.5	218.3	212.3
80°	64.8	110.4	157.1	148.7	152.3
82.5°	42.0	84.0	97.2	110.4	113.9
85°	24.0	49.2	60.0	64.8	67.2
87.5°	10.8	18.0	24.0	24.0	22.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)