

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: P475065

Luminaire Tested: **22CZ2-39VHE-RDP-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475065
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-39VHE-RDP-UNV-L840-CD1-U
Description: 2'X2' 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: 2676.4 lumens
Efficiency: N/A
Efficacy: 100.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

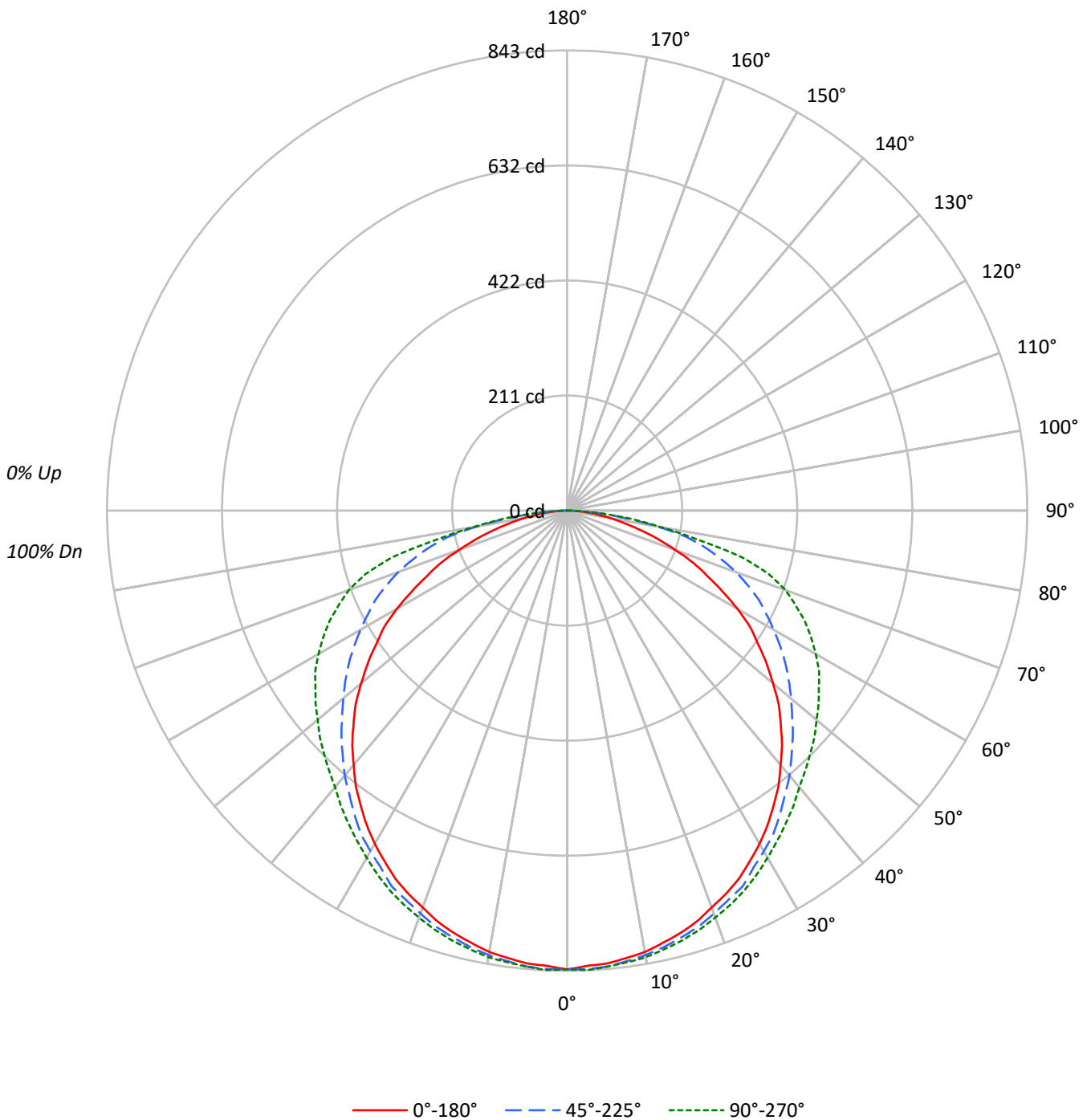
Input Watts (W): 26.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	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°	2262	2262	2262
5°	2250	2266	2266
10°	2243	2260	2270
15°	2232	2254	2271
20°	2216	2249	2272
25°	2210	2257	2280
30°	2190	2239	2282
35°	2167	2231	2296
40°	2137	2227	2323
45°	2106	2226	2397
50°	2061	2242	2497
55°	2005	2291	2641
60°	1940	2352	2829
65°	1805	2470	3060
70°	1658	2588	3346
75°	1455	2722	3460
80°	1252	2593	2717
85°	1093	1883	2066



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.5	3.0
10°-20°	228.3	8.5
20°-30°	348.4	13.0
30°-40°	425.3	15.9
40°-50°	454.8	17.0
50°-60°	439.0	16.4
60°-70°	377.9	14.1
70°-80°	255.7	9.6
80°-90°	67.5	2.5
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
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0°-30°	656.2	24.5
0°-40°	1081.6	40.4
0°-60°	1975.3	73.8
0°-90°	2676.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2676.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	841	841	841	841	841	
5°	833	835	839	839	839	79
15°	801	803	809	813	815	226
25°	744	748	760	764	768	342
35°	660	665	679	693	699	413
45°	553	563	585	614	630	427
55°	427	441	488	537	563	383
65°	284	311	388	449	480	282
75°	140	185	262	315	333	150
85°	35	49	61	63	67	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	840.6	840.6	840.6	840.6	840.6
2.5°	834.8	836.7	840.6	840.6	842.6
5°	832.8	834.8	838.7	838.7	838.7
7.5°	827.0	828.9	832.8	834.8	834.8
10°	820.9	823.0	827.0	828.9	830.9
12.5°	811.1	813.1	818.9	823.0	823.0
15°	801.3	803.3	809.2	813.1	815.0
17.5°	789.4	793.5	799.4	803.3	805.2
20°	773.7	777.7	785.5	791.5	793.5
22.5°	760.0	764.0	771.8	777.7	781.6
25°	744.2	748.1	760.0	764.0	767.9
27.5°	724.4	728.5	738.3	746.2	752.0
30°	704.9	708.8	720.5	730.5	734.4
32.5°	683.2	689.0	702.9	710.7	716.6
35°	659.5	665.4	679.2	692.9	699.0
37.5°	636.0	641.9	655.6	673.4	681.2
40°	608.4	616.3	633.9	657.5	661.4
42.5°	582.8	592.6	608.4	636.0	645.8
45°	553.3	563.0	584.8	614.3	629.9
47.5°	525.7	535.5	559.1	594.5	614.3
50°	492.2	505.9	535.5	576.9	596.5
52.5°	460.7	472.5	512.0	557.2	580.8
55°	427.3	441.0	488.3	537.4	563.0
57.5°	397.7	409.5	462.7	517.8	547.4
60°	360.4	376.0	437.1	496.1	525.7
62.5°	320.8	344.5	411.4	472.5	504.0
65°	283.5	311.1	387.9	448.8	480.5
67.5°	250.0	279.6	358.4	423.4	452.9
70°	210.7	248.1	328.9	391.9	425.3
72.5°	175.3	216.6	295.4	358.4	387.9
75°	139.9	185.1	261.8	315.0	332.8
77.5°	108.2	151.6	224.4	240.2	242.2
80°	80.8	120.1	167.3	169.2	175.3
82.5°	55.2	84.7	108.2	118.2	120.1
85°	35.4	49.3	61.0	63.0	66.9
87.5°	15.8	17.8	21.7	19.8	19.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)