

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: P475036

Luminaire Tested: **22CZ2-39VHE-RDP-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475036
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-L835-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY 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: 2626.5 lumens
Efficiency: N/A
Efficacy: 98.4 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

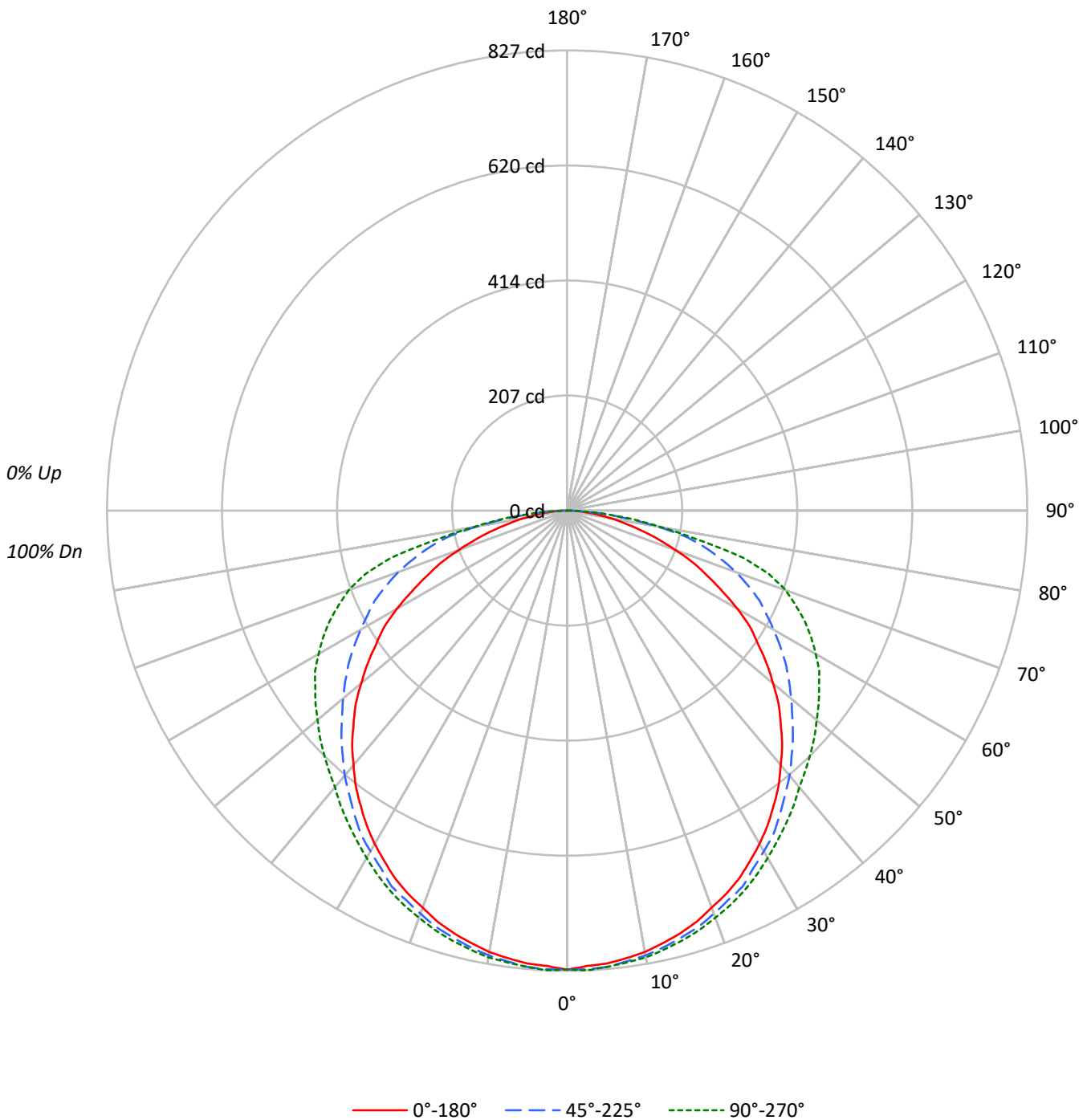
Input Watts (W): 26.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2220	2220	2220
5°	2208	2223	2223
10°	2201	2217	2228
15°	2191	2212	2228
20°	2174	2207	2230
25°	2168	2215	2238
30°	2149	2197	2239
35°	2126	2190	2254
40°	2098	2185	2280
45°	2066	2184	2353
50°	2022	2200	2451
55°	1967	2248	2592
60°	1903	2308	2777
65°	1771	2424	3002
70°	1627	2539	3284
75°	1428	2671	3396
80°	1229	2545	2665
85°	1071	1849	2029



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.0	3.0
10°-20°	224.1	8.5
20°-30°	341.9	13.0
30°-40°	417.4	15.9
40°-50°	446.3	17.0
50°-60°	430.8	16.4
60°-70°	370.9	14.1
70°-80°	250.9	9.6
80°-90°	66.2	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
0°-30°	644.0	24.5
0°-40°	1061.4	40.4
0°-60°	1938.5	73.8
0°-90°	2626.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2626.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	825	825	825	825	825	
5°	817	819	823	823	823	78
15°	786	788	794	798	800	222
25°	730	734	746	750	754	336
35°	647	653	667	680	686	405
45°	543	552	574	603	618	419
55°	419	433	479	527	552	376
65°	278	305	381	440	472	277
75°	137	182	257	309	327	147
85°	35	48	60	62	66	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	825.0	825.0	825.0	825.0	825.0
2.5°	819.2	821.1	825.0	825.0	826.9
5°	817.3	819.2	823.1	823.1	823.1
7.5°	811.5	813.5	817.3	819.2	819.2
10°	805.6	807.7	811.5	813.5	815.4
12.5°	796.0	797.9	803.7	807.7	807.7
15°	786.4	788.3	794.1	797.9	799.8
17.5°	774.7	778.7	784.5	788.3	790.2
20°	759.3	763.2	770.8	776.8	778.7
22.5°	745.9	749.7	757.4	763.2	767.0
25°	730.3	734.2	745.9	749.7	753.6
27.5°	710.9	715.0	724.6	732.2	738.0
30°	691.7	695.6	707.1	716.9	720.7
32.5°	670.4	676.2	689.8	697.5	703.3
35°	647.2	653.0	666.6	680.0	686.0
37.5°	624.2	629.9	643.4	660.8	668.5
40°	597.1	604.8	622.0	645.3	649.1
42.5°	571.9	581.5	597.1	624.2	633.8
45°	542.9	552.5	573.9	602.8	618.2
47.5°	515.9	525.5	548.7	583.5	602.8
50°	483.0	496.5	525.5	566.2	585.4
52.5°	452.1	463.7	502.4	546.8	570.0
55°	419.3	432.7	479.2	527.4	552.5
57.5°	390.3	401.8	454.1	508.2	537.2
60°	353.6	369.0	428.9	486.9	515.9
62.5°	314.9	338.1	403.8	463.7	494.6
65°	278.2	305.3	380.7	440.4	471.5
67.5°	245.4	274.4	351.7	415.5	444.5
70°	206.8	243.4	322.7	384.6	417.4
72.5°	172.0	212.5	289.9	351.7	380.7
75°	137.3	181.6	256.9	309.1	326.6
77.5°	106.2	148.8	220.2	235.8	237.7
80°	79.3	117.9	164.2	166.1	172.0
82.5°	54.1	83.1	106.2	116.0	117.9
85°	34.7	48.4	59.9	61.8	65.7
87.5°	15.6	17.5	21.3	19.4	19.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)