

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: P475054

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

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475054
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-39-RDP-UNV-L840-CD1-U
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS W/ RDP INSERT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

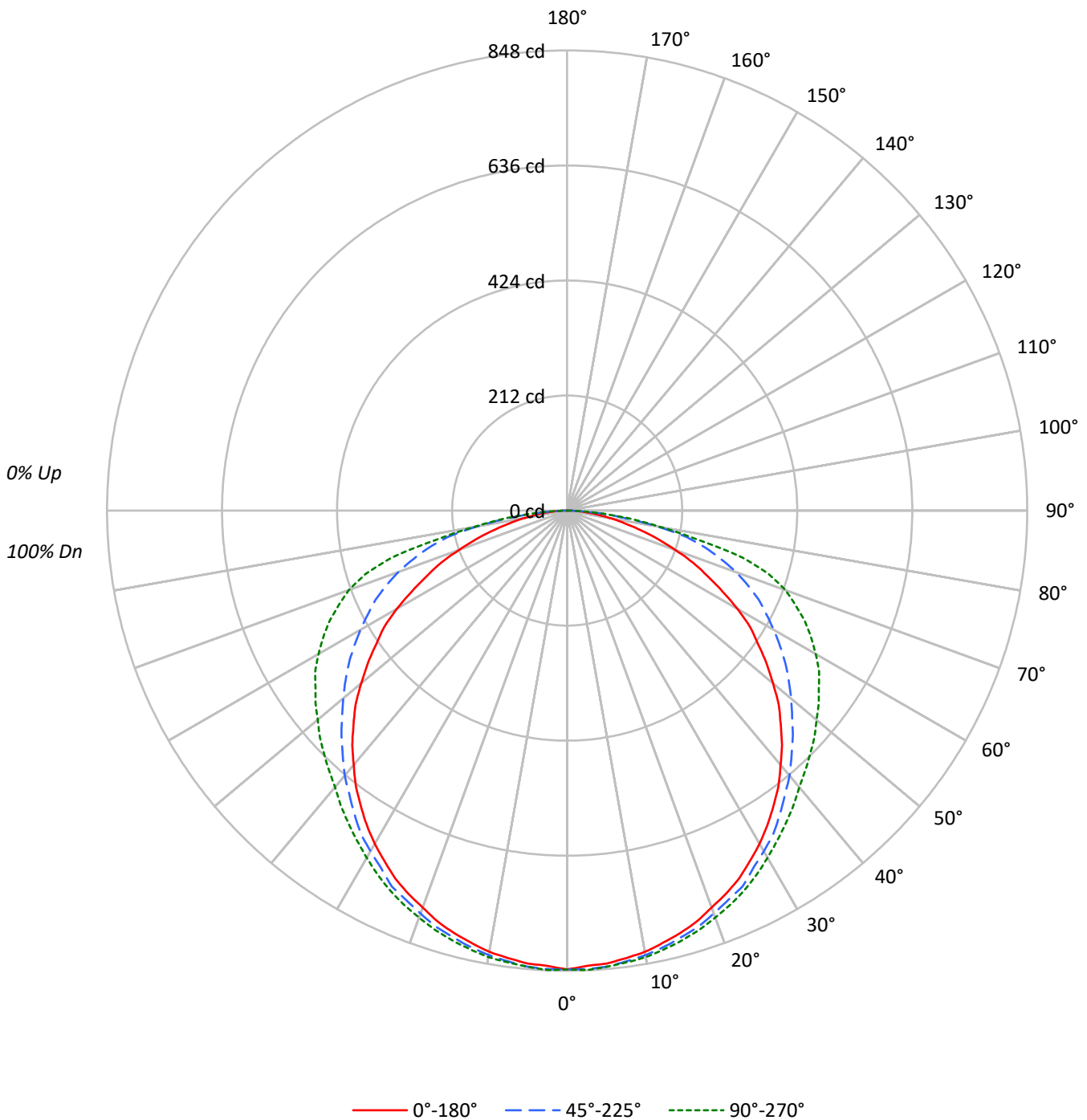
Lumens per Lamp: N/A
Luminaire Lumens: 2692.1 lumens
Efficiency: N/A
Efficacy: 91.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 29.3
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	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°	2275	2275	2275
5°	2263	2279	2279
10°	2256	2273	2284
15°	2245	2267	2284
20°	2229	2263	2286
25°	2223	2270	2293
30°	2203	2252	2295
35°	2179	2244	2310
40°	2150	2240	2337
45°	2118	2238	2411
50°	2073	2255	2512
55°	2016	2305	2657
60°	1951	2366	2846
65°	1815	2485	3077
70°	1667	2603	3366
75°	1463	2738	3480
80°	1260	2608	2732
85°	1099	1896	2078



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.0	3.0
10°-20°	229.7	8.5
20°-30°	350.4	13.0
30°-40°	427.8	15.9
40°-50°	457.5	17.0
50°-60°	441.6	16.4
60°-70°	380.1	14.1
70°-80°	257.2	9.6
80°-90°	67.9	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°	660.1	24.5
0°-40°	1087.9	40.4
0°-60°	1986.9	73.8
0°-90°	2692.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2692.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	846	846	846	846	846	
5°	838	840	844	844	844	80
15°	806	808	814	818	820	227
25°	749	752	764	768	772	345
35°	663	669	683	697	703	415
45°	556	566	588	618	634	430
55°	430	444	491	541	566	385
65°	285	313	390	451	483	284
75°	141	186	263	317	335	151
85°	36	50	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°	845.6	845.6	845.6	845.6	845.6
2.5°	839.7	841.6	845.6	845.6	847.5
5°	837.7	839.7	843.6	843.6	843.6
7.5°	831.8	833.8	837.7	839.7	839.7
10°	825.7	827.9	831.8	833.8	835.7
12.5°	815.9	817.8	823.7	827.9	827.9
15°	806.0	808.0	813.9	817.8	819.8
17.5°	794.0	798.2	804.1	808.0	810.0
20°	778.3	782.2	790.1	796.2	798.2
22.5°	764.5	768.4	776.3	782.2	786.2
25°	748.6	752.5	764.5	768.4	772.4
27.5°	728.7	732.8	742.7	750.5	756.4
30°	709.0	712.9	724.8	734.8	738.7
32.5°	687.2	693.1	707.0	714.9	720.8
35°	663.4	669.3	683.2	697.0	703.1
37.5°	639.7	645.6	659.4	677.3	685.2
40°	612.0	619.9	637.6	661.4	665.3
42.5°	586.2	596.1	612.0	639.7	649.6
45°	556.5	566.3	588.2	617.9	633.6
47.5°	528.8	538.6	562.4	598.0	617.9
50°	495.1	508.9	538.6	580.3	600.0
52.5°	463.4	475.2	515.0	560.4	584.3
55°	429.8	443.6	491.2	540.6	566.3
57.5°	400.1	411.9	465.4	520.9	550.6
60°	362.5	378.2	439.6	499.0	528.8
62.5°	322.7	346.5	413.8	475.2	506.9
65°	285.1	312.9	390.2	451.4	483.3
67.5°	251.5	281.2	360.5	425.8	455.6
70°	211.9	249.5	330.8	394.2	427.8
72.5°	176.3	217.8	297.1	360.5	390.2
75°	140.7	186.2	263.3	316.8	334.7
77.5°	108.8	152.5	225.7	241.7	243.6
80°	81.3	120.8	168.3	170.2	176.3
82.5°	55.5	85.2	108.8	118.9	120.8
85°	35.6	49.6	61.4	63.4	67.3
87.5°	15.9	17.9	21.8	19.9	19.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)