

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: P475057

Luminaire Tested: **22CZ2-24HE-RDP-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475057
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-24HE-RDP-UNV-L840-CD1-U
Description: 2'X2' TROFFER LED MODULE, 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: 1689.1 lumens
Efficiency: N/A
Efficacy: 93.3 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

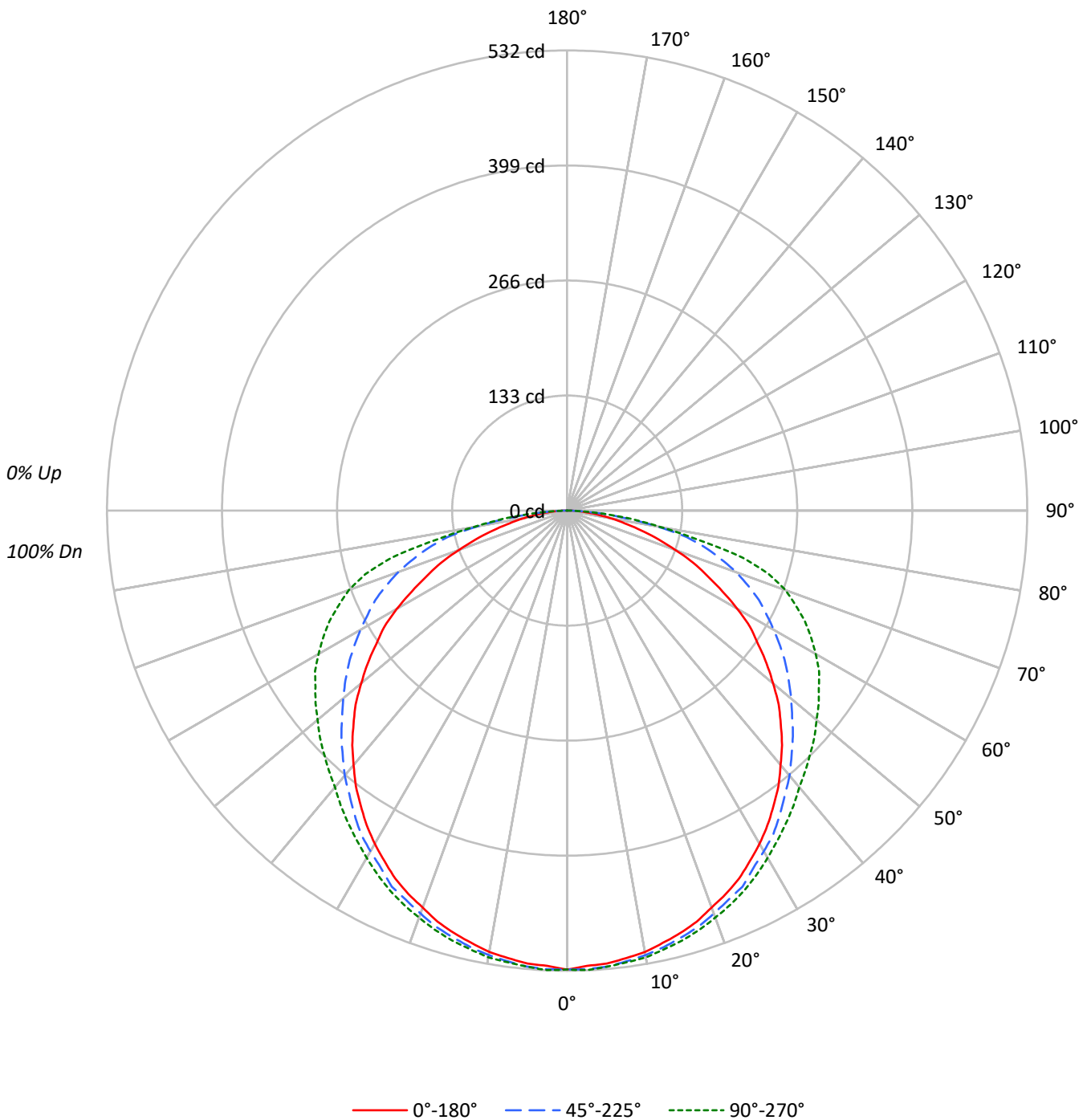
Input Watts (W): 18.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1428	1428	1428
5°	1420	1430	1430
10°	1416	1426	1433
15°	1409	1423	1433
20°	1398	1420	1434
25°	1395	1424	1439
30°	1382	1413	1440
35°	1367	1408	1449
40°	1349	1405	1467
45°	1329	1405	1513
50°	1301	1415	1576
55°	1265	1446	1667
60°	1224	1484	1786
65°	1139	1559	1931
70°	1046	1633	2112
75°	918	1718	2183
80°	790	1636	1714
85°	689	1189	1303



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.2	3.0
10°-20°	144.1	8.5
20°-30°	219.9	13.0
30°-40°	268.4	15.9
40°-50°	287.0	17.0
50°-60°	277.0	16.4
60°-70°	238.5	14.1
70°-80°	161.4	9.6
80°-90°	42.6	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°	414.1	24.5
0°-40°	682.6	40.4
0°-60°	1246.7	73.8
0°-90°	1689.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1689.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	531	531	531	531	531	
5°	526	527	529	529	529	50
15°	506	507	511	513	514	143
25°	470	472	480	482	485	216
35°	416	420	429	437	441	260
45°	349	355	369	388	398	270
55°	270	278	308	339	355	242
65°	179	196	245	283	303	178
75°	88	117	165	199	210	95
85°	22	31	38	40	42	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	530.6	530.6	530.6	530.6	530.6
2.5°	526.8	528.1	530.6	530.6	531.8
5°	525.6	526.8	529.3	529.3	529.3
7.5°	521.9	523.1	525.6	526.8	526.8
10°	518.1	519.4	521.9	523.1	524.4
12.5°	511.9	513.1	516.8	519.4	519.4
15°	505.7	507.0	510.7	513.1	514.4
17.5°	498.2	500.8	504.5	507.0	508.2
20°	488.3	490.8	495.7	499.6	500.8
22.5°	479.7	482.2	487.1	490.8	493.3
25°	469.7	472.2	479.7	482.2	484.6
27.5°	457.2	459.8	466.0	470.9	474.6
30°	444.9	447.3	454.7	461.0	463.5
32.5°	431.2	434.9	443.6	448.6	452.3
35°	416.2	419.9	428.7	437.3	441.2
37.5°	401.4	405.1	413.7	425.0	429.9
40°	384.0	388.9	400.0	415.0	417.5
42.5°	367.8	374.0	384.0	401.4	407.6
45°	349.2	355.3	369.1	387.7	397.6
47.5°	331.8	337.9	352.9	375.2	387.7
50°	310.7	319.3	337.9	364.1	376.5
52.5°	290.8	298.2	323.1	351.6	366.6
55°	269.7	278.3	308.2	339.2	355.3
57.5°	251.0	258.4	292.0	326.8	345.5
60°	227.4	237.3	275.8	313.1	331.8
62.5°	202.5	217.4	259.7	298.2	318.1
65°	178.9	196.3	244.8	283.2	303.2
67.5°	157.8	176.4	226.2	267.2	285.8
70°	133.0	156.6	207.6	247.3	268.4
72.5°	110.6	136.7	186.4	226.2	244.8
75°	88.3	116.8	165.2	198.8	210.0
77.5°	68.3	95.7	141.6	151.6	152.9
80°	51.0	75.8	105.6	106.8	110.6
82.5°	34.8	53.5	68.3	74.6	75.8
85°	22.3	31.1	38.5	39.8	42.2
87.5°	10.0	11.2	13.7	12.5	12.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)