

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: P475051

Luminaire Tested: **22CZ2-20-RDP-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475051
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-20-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: 1462.4 lumens
Efficiency: N/A
Efficacy: 90.3 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

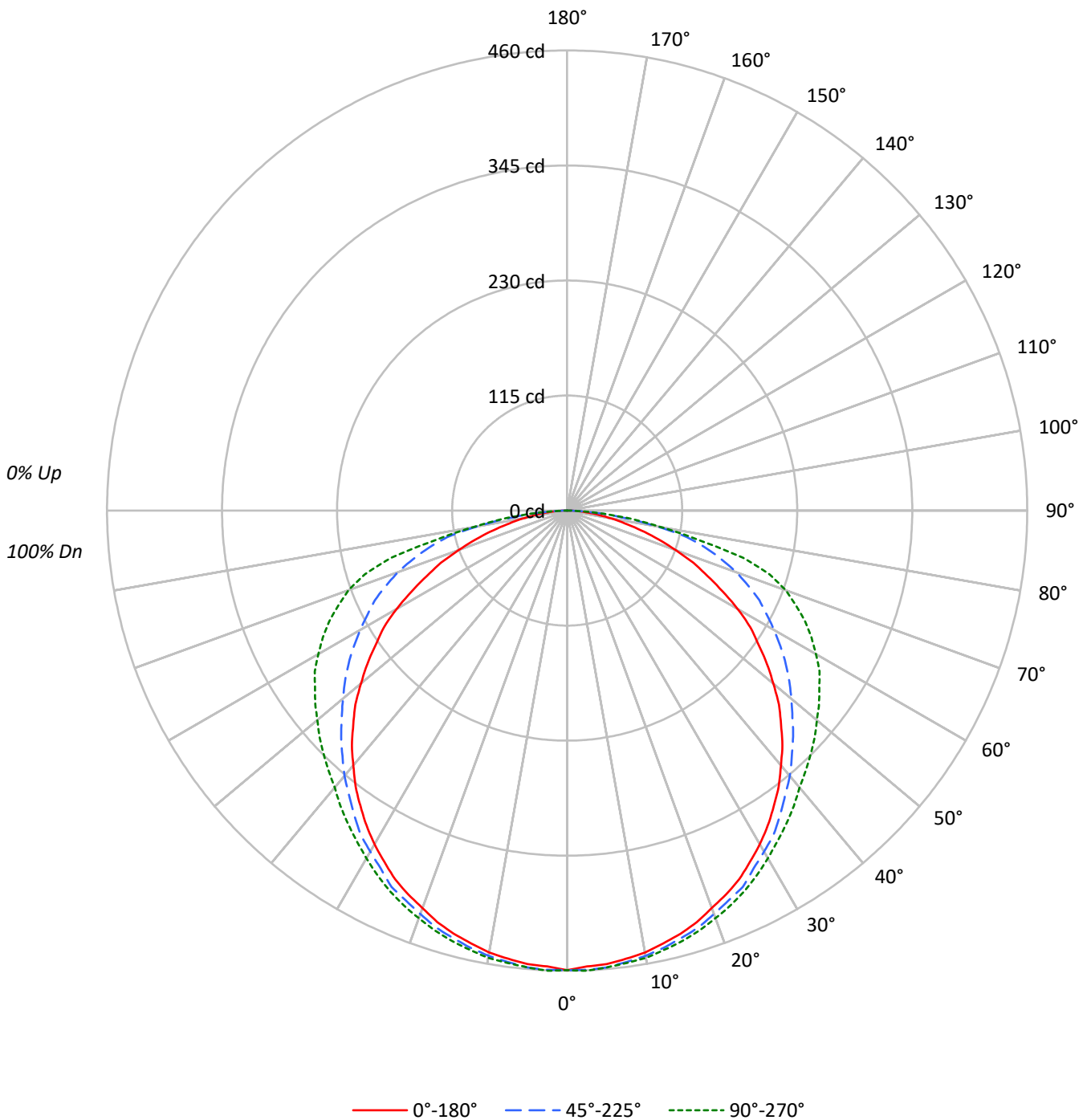
Input Watts (W): 16.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1236	1236	1236
5°	1229	1238	1238
10°	1226	1235	1241
15°	1220	1232	1241
20°	1211	1229	1242
25°	1208	1233	1246
30°	1197	1223	1247
35°	1184	1219	1255
40°	1168	1217	1270
45°	1150	1216	1310
50°	1126	1225	1364
55°	1095	1252	1444
60°	1060	1285	1546
65°	986	1350	1671
70°	906	1414	1828
75°	794	1487	1890
80°	685	1416	1485
85°	596	1031	1130



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.5	3.0
10°-20°	124.8	8.5
20°-30°	190.3	13.0
30°-40°	232.4	15.9
40°-50°	248.5	17.0
50°-60°	239.9	16.4
60°-70°	206.5	14.1
70°-80°	139.7	9.6
80°-90°	36.9	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°	358.6	24.5
0°-40°	591.0	40.4
0°-60°	1079.4	73.8
0°-90°	1462.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1462.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	459	459	459	459	459	
5°	455	456	458	458	458	43
15°	438	439	442	444	445	124
25°	407	409	415	417	420	187
35°	360	364	371	379	382	226
45°	302	308	320	336	344	233
55°	234	241	267	294	308	209
65°	155	170	212	245	262	154
75°	76	101	143	172	182	82
85°	19	27	33	34	37	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	459.4	459.4	459.4	459.4	459.4
2.5°	456.1	457.2	459.4	459.4	460.4
5°	455.1	456.1	458.3	458.3	458.3
7.5°	451.9	452.9	455.1	456.1	456.1
10°	448.6	449.7	451.9	452.9	454.0
12.5°	443.2	444.3	447.5	449.7	449.7
15°	437.9	438.9	442.1	444.3	445.4
17.5°	431.3	433.6	436.8	438.9	440.0
20°	422.8	424.9	429.2	432.5	433.6
22.5°	415.3	417.4	421.7	424.9	427.1
25°	406.7	408.8	415.3	417.4	419.6
27.5°	395.9	398.1	403.4	407.7	410.9
30°	385.2	387.3	393.7	399.2	401.3
32.5°	373.3	376.5	384.1	388.4	391.6
35°	360.4	363.6	371.2	378.6	382.0
37.5°	347.5	350.7	358.2	368.0	372.2
40°	332.5	336.7	346.4	359.3	361.4
42.5°	318.5	323.8	332.5	347.5	352.9
45°	302.3	307.7	319.5	335.7	344.2
47.5°	287.2	292.6	305.5	324.9	335.7
50°	269.0	276.4	292.6	315.3	325.9
52.5°	251.8	258.2	279.8	304.5	317.4
55°	233.5	241.0	266.8	293.7	307.7
57.5°	217.3	223.7	252.8	283.0	299.1
60°	196.9	205.5	238.8	271.1	287.2
62.5°	175.3	188.3	224.8	258.2	275.4
65°	154.9	170.0	212.0	245.2	262.5
67.5°	136.6	152.8	195.8	231.3	247.5
70°	115.1	135.6	179.7	214.1	232.4
72.5°	95.8	118.3	161.4	195.8	212.0
75°	76.4	101.1	143.0	172.1	181.8
77.5°	59.1	82.8	122.6	131.3	132.3
80°	44.2	65.6	91.4	92.5	95.8
82.5°	30.1	46.3	59.1	64.6	65.6
85°	19.3	26.9	33.4	34.4	36.6
87.5°	8.7	9.7	11.9	10.8	10.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)